

DEPARTMENT OF AGRICULTURE
AND TECHNICAL INSTRUCTION FOR IRELAND.

THIRTEENTH
ANNUAL GENERAL REPORT
OF THE DEPARTMENT,
1912-13.

Presented to both Houses of Parliament by Command of His Majesty



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DUBLIN CASTLE,

19th February, 1914.

SIR,

I have to acknowledge the receipt of your letter of the 17th instant, forwarding, for submission to His Excellency the Lord Lieutenant, the Thirteenth Annual General Report of the Department of Agriculture and Technical Instruction for Ireland for the Year 1912-13.

I am,

Sir,

Your obedient Servant,

E. O. FARRELL.

THE SECRETARY,

Department of Agriculture
and Technical Instruction,
Dublin.

[iii]

TABLE OF CONTENTS.

	Page
INTRODUCTION,	1
PART I.—ADMINISTRATION AND FUNDS.	
COUNCIL OF AGRICULTURE AND BOARDS—	
The Council of Agriculture,	2
The Agricultural Board,	3
The Board of Technical Instruction,	4
The Consultative Committee of Education,	5
FUNDS OF THE DEPARTMENT—	
The Parliamentary Vote,	6
The Endowment Fund,	7
The General Cattle Diseases Fund,	7
ADMINISTRATION OF THE ENDOWMENT FUND—	
The Endowment Fund,	8
Funds for Agricultural Purposes,	8
Funds for Technical Instruction,	9
Funds for Fishery Purposes,	11
Sea and Coast Fisheries Fund,	11
CENTRAL INSTITUTIONS—	
The Royal College of Science,	12
Other Central Institutions,	12
The Geological Survey of Ireland,	15
MISCELLANEOUS—	
Development Act,	15
Royal Veterinary College,	17
The Tuberculosis (Ireland) Order, 1913,	18
Application of Statute Order, 1898,	18
Agricultural Credits,	19
Irish Minerals and Raw Materials,	20
Grants of Books to Village Libraries,	20
PART II.—DETAILS OF THE DEPARTMENT'S OPERATIONS, 1912-13.	
AGRICULTURE—	
AGRICULTURAL INSTRUCTION,	21
Royal College of Science, Agricultural Faculty,	22
Albert Agricultural College, Glasnevin,	24
Agricultural Stations,	25
Agricultural Classes and Schools,	27
Agricultural Schools for Girls,	33
Monaster Institute, Cork,	34
Ulster Dairy School, Cookstown,	35
School of Rural Domestic Economy,	36

PART II.—DETAILS OF THE DEPARTMENT'S OPERATIONS

1912-13—continued.

AGRICULTURE—continued.	Page
Scheme of Instruction in Agriculture,	36
Agricultural Overseers in Congested Districts,	38
Special Demonstration Plots in Congested Districts,	40
Potato Spraying in Congested Districts,	41
Purchase of Implements,	43
Tree Planting in Congested Districts,	43
Veterinary Dispensaries in Congested Districts,	44
Poultry Keeping,	46
Butter-making,	49
Horticulture and Bee-keeping,	49
Bee Pest Prevention (Ireland) Act, 1908,	51
Prizes for Cottages and Small Farms,	52
Prizes for Tillage,	53
IMPROVEMENT OF LIVE STOCK,	53
Horse-Breeding,	53
Asses,	59
Cattle-Breeding,	59
Swine-Breeding,	64
Sheep-Breeding,	66
Subsidies to Shows,	67
SPECIAL INVESTIGATIONS,	68
Field Experiments,	68
Flax Growing,	69
Sugar Beet,	71
Fruit as a Farm Crop Experiment,	72
Tobacco,	73
Marketing of Early Potatoes,	74
Marketing of Fruit,	75
Poultry Fattening,	76
Marketing of Eggs,	76
Egg-Laying Competition,	76
Improvement in the Management of Cressmosses,	77
Winter Dairying,	79
Registration of Dairy Cattle,	80
Cow Testing Associations,	80
Cheese Making Experiments,	81
Live Stock Feeding Experiments,	82
Dead Meat Trade,	82
Analysis of Spraying Materials,	84
Fertilisers and Feeding Stuff, Noxious Weeds, etc.,	84
Sampling of Agricultural Seeds,	86
Seeds and Plant Diseases, Advisory Section,	87
American Gooseberry Mildew and Black Currant Mite (Ireland) Order, 1912,	88
Black Scab in Potatoes (Ireland) Order, 1908,	89
Plant Breeding Advisory Section,	89
Veterinary Advisory Section,	91
Wattle Fly Experiments,	92
Forestry,	92
Loans for Agricultural Purposes,	95
TECHNICAL INSTRUCTION—	
Schemes under Local Authorities,	99
Technical Schools,	100
Technical Education in Rural Districts,	102
Secondary Schools,	105

[v]

PART II.—DETAILS OF THE DEPARTMENT'S OPERATIONS
1912-13—*continued.*

TECHNICAL INSTRUCTION— <i>continued.</i>	Page
REPORTS OF INSTRUCTORS,	106
THE TRAINING OF TEACHERS,	106
Summer Courses, 1913,	109
Teachers—Science and Art,	141
" Commercial Subjects,	142
" Manual Instruction,	142
" Domestic Economy,	142
" National School Teachers,	143
CENTRAL INSTITUTIONS—	
Royal College of Science and Metropolitan School of Art,	145
Irish Training School of Domestic Economy,	145
Kilbarney School of Housewifery,	146
SCHOLARSHIPS,	146
Scholarships for Boys,	146
Scholarships at Residential Schools of Domestic Training,	148
Local Exhibitions,	149
Senior Science Scholarships,	149
Senior Art Scholarships,	150
Commercial Scholarships,	150
Crocket Work and Sprigging Scholarships,	150
Manual Training (Woodwork) Scholarships,	150
FISHERIES—	
Sea Fisheries,	151
Mackerel Curing,	151
Government Brand for Cured Herrings,	151
Canalton,	152
Larne,	152
Net Mending,	152
Sale of Fish in Inland Towns,	152
Marine Superintendence,	153
Fiers and Harbours,	153
Fishery Investigation,	153
Salmon Fisheries,	153
STATISTICS AND INTELLIGENCE,	154
VETERINARY,	160
TRANSIT AND MARKETS—	
TRANSPORT OF ANIMALS,	161
TRANSPORT OF PRODUCE,	162
Butter,	162
Eggs,	163
Fruit,	164
Fish,	164
Fresh Meat,	165
DELAYS AND DAMAGE IN TRANSIT,	165
RAILWAY RATES,	166

**PART II.—DETAILS OF THE DEPARTMENT'S OPERATIONS,
1912-13—continued.**

TRANSIT AND MARKETS—continued.	Page
SALE OF FOOD AND DRUGS ACTS,	169
Administration of the Acts,	169
Samples taken by Officers of Local Authorities,	169
Department's Officers,	171
Water in Butter,	171
Labelling of Margarine,	172
Manufacture of and Wholesale Dealing in Margarine,	173
Inspection of Margarine Registers,	174
Registration of Butter Factories,	174
Inspection of Butter Factories,	174
Samples taken in Butter Factories,	175
Milk Blended Butter,	176
Sale of Butter (Ireland) Regulations, 1902,	176
Approval of names for Margarine,	177
Samples taken at Irish Ports,	177
Analysts,	177
MERCHANDISE MARKS ACTS—	
Misleading Descriptions—Butter,	177
Eggs,	178
Miscellaneous	178
Frauds—Butter and Eggs	178
ACTION TAKEN BY THE DEPARTMENT'S STAFF IN GREAT BRITAIN,	179
MARKETS AND FAIRS (WEIGHING OF CATTLE) ACTS, 1867 AND 1891,	181
APPENDICES	[2]

THIRTEENTH ANNUAL GENERAL REPORT

OF THE

Department of Agriculture and Technical Instruction
for Ireland.

TO HIS EXCELLENCY
JOHN CAMPBELL, EARL OF ABERDEEN,
&c., &c., &c.,

LORD LIEUTENANT-GENERAL AND GENERAL GOVERNOR
OF IRELAND.

MAY IT PLEASE YOUR EXCELLENCY,

I have the honour, on behalf of the Department of Agriculture and Technical Instruction for Ireland, to submit their Thirteenth Annual General Report.

The Annual Report of the Department includes operations up to the close of the agricultural year, as it has been found more convenient to adopt this arrangement than to limit the Report to the period of the financial year.

The Report has been divided as follows :—

Part I.—ADMINISTRATION AND FUNDS.

1. Council of Agriculture and Boards.
2. Funds of the Department.
3. Administration of the Endowment Fund.
4. Central Institutions.
5. Miscellaneous.

Part II.—DETAILS OF THE DEPARTMENT'S OPERATIONS.

1. Agriculture.
2. Technical Instruction.
3. Fisheries.
4. Statistics and Intelligence.
5. Veterinary.
6. Transit.

PART I.—ADMINISTRATION AND FUNDS.

1.—COUNCIL OF AGRICULTURE AND BOARDS.

The Council of Agriculture, which is constituted under Section 7 of the Agriculture and Technical Instruction (Ireland) Act, 1899, consists of
 COUNCIL OF AGRICULTURE. 104 members, of whom 68 are appointed by the County Councils, and 34 are nominated by the Department, the President and Vice-President of the Department being *ex-officio* members.

There were two meetings of the Council held during 1913, one on the 21st January and the second on the 28th November.

The meeting in January was specially convened at the request of a large number of members of the Council to discuss the situation arising out of the outbreaks of Foot and Mouth Disease in Ireland, and in particular to consider the arrangement then being proposed for the detention of Irish cattle at British ports. The following resolution was adopted:—

"That the Irish Council of Agriculture, specially convened to consider the intended permanent detention of Irish cattle at British Ports for a minimum period of twelve hours, beg to enter a most emphatic protest against any such proposal. They believe it is unnecessary, will prove vexatious and costly in working, and in most cases be found detrimental rather than beneficial to the cattle themselves. They are further of opinion that any such permanent discrimination against Irish cattle is totally unwarranted, must inevitably prejudice their market value, and tend to lessen legitimate competition. The cumulative effect cannot fail to inflict a crushing blow on Ireland's greatest agricultural industry.

"In making this protest the Council desire it to be understood that they take no narrow view of this problem. They recognise that British as well as Irish agriculturists are entitled to take every reasonable precaution against the spread of Foot and Mouth Disease amongst their herds; and it is obviously desirable that, for shipments sent out of and coming into Ireland, adequate provisions against the danger of disease and for securing the health and humane treatment of the animals should be made. But these provisions ought not and need not be of such a nature as to involve grievous detriment to the industry in whose interests they are supposed to be taken. Both Irish producers and British purchasers of Irish live stock have, in the opinion of the Council, a common interest in the solution of this problem, and the Council respectfully urge and confidently hope that the Agricultural Departments concerned will work out a solution on this basis."

It should be mentioned that since this resolution was passed the period of detention has been reduced to ten hours. A further resolution of the Council at this meeting recorded their appreciation of the successful efforts of the Department

and their veterinary officers in dealing with the outbreaks of Foot and Mouth Disease.

At the November meeting the principal subjects discussed were the following:—The question of tuberculosis in relation to the cattle industry; the embargo against the importation of Irish potatoes into the United States; the Application of Enactments Order (Section 12) of the Local Government (Ireland) Act, 1898, and its relation to members of County Committees; the period of detention of Irish animals at British landing places; the "Isle of Wight" Disease in bees; and the question of obtaining grants for harbour improvements from the Development Commissioners.

Both meetings were, by kind permission of the Council of the Royal Dublin Society, held in the Lecture Theatre at Leinster House, Dublin. A summary of the proceedings of each meeting of the Council, together with the Vice-President's Address, was published in the Department's JOURNAL.*

THE AGRICULTURAL BOARD in the year 1912-13 consisted of the following members:—

Name and Address	By whom appointed
Clark, Alexander L., J.P., Moyola Lodge, Castleblawson, Co. Londonderry.	The Department.
Dale, Alderman Henry, J.P., Riverview House, Sunday's Well, Cork.	The Department.
Daly, Very Rev. Canon, D.D., P.P., Lough Ballymore, Co. Sligo.	Connacht Provincial Committee.
Downes, Robert, Russeltown, Mullingar.	Leinster Provincial Committee.
Everard, Colonel Sir Nugent T., Bart., H.M.L., Randestown, Navan, Co. Meath.	The Department.
Gore-Booth, Sir Jocelyn, Bart., D.L., Lissadell, Sligo.	The Department.
Healy, His Grace the Most Rev. John, D.D., Lord Archbishop of Tuam, St. Jarlath's, Tuam, Co. Galway.	Connacht Provincial Committee.
Kelly, Most Rev. Denis, D.D., Lord Bishop of Ross, Bishop's House, Skibbereen, Co. Cork.	Munster Provincial Committee.
McCance, John S. F., J.P., Woodbourne, Dummurry, Co. Antrim.	Ulster Provincial Committee.
Murnaghan, George, J.P., Lisanelly House, Omagh, Co. Tyrone.	Ulster Provincial Committee.
O'Gorman, David Lee, Janeville, Fermoy, Co. Cork.	Munster Provincial Committee.
O'Neill, Patrick J., J.P., Kinsealy House, Malahide, Co. Dublin.	Leinster Provincial Committee.

* See JOURNAL, Vol. XIII., No. 2; Vol. XIV., No. 2

The Agricultural Board meet at the offices of the Department, Upper Merrion Street, Dublin. The funds controlled by the Board are set forth on page 8. The schemes and operations of the Department that are explained in detail in the section of the report which deals with Agriculture have all been undertaken with the advice and concurrence of the Board.

THE BOARD OF TECHNICAL INSTRUCTION. The Board of Technical Instruction in the year 1912-18 consisted of the following members:—

Name and Address	By whom appointed
Barbour, Frank, 4 Rosemount Terrace, Dunmurry, Co. Antrim.	Ulster Provincial Committee.
Crozier, James, J.P., V.S., Montpelier House, Phoenix Park, Dublin.	Dublin County Borough Council.
Dickson, Alexander, 15 Parliament Street, Dublin.	Dublin County Borough Council.
Dunn, Christopher J., J.P., Hotel Metropole, Cork.	The Department.
Evans, Rev. Henry, D.D., M.R.I.A., F.I.H., St. Helen's, Blackrock, Co. Dublin.	Commissioners of National Education.
Finlay, Rev. G. A., M.A., University Hall, Lower Hatch Street, Dublin.	Leinster Provincial Committee.
Henderson, Sir James, J.P., D.L., Oakley House, Windsor Park, Belfast.	The Department.
Johnston, Sir John Barr, J.P., Crawford Square, Londonderry.	Londonderry County Borough Council.
Macartney, William, J.P., 33 Cliftonville Road, Belfast.	Belfast County Borough Council.
McClolland, John A., M.A., D.Sc., F.R.S., Rostrevor, Ormeau Road, Rathgar, Co. Dublin.	The Department.
McDonagh, Martin, J.P., Galway.	The Department.
MacGuire, James P., J.P., Roskey, Drogheda, Co. Louth.	Connacht Provincial Committee.
Mercier, Alderman Samuel T., J.P., 2 Mount Clifton, Cliftonville Road, Belfast.	Belfast County Borough Council.
O'Connell, Seaghan T., 3 Belvidere Avenue, Dublin.	Dublin County Borough Council.
Power, Thomas, Dungarvan, Co. Waterford.	Munster Provincial Committee.
Ryan, Timothy, 126 O'Connell Street, Limerick.	Limerick County Borough Council.
Shoehan, Most Rev. Richard A., D.D., Lord Bishop of Waterford and Lismore, Bishop's House, John's Hill, Waterford.	Waterford County Borough Council.
Sisk, Richard, 2 Evergreen Villas, Evergreen Road, Cork.	Cork County Borough Council.
Starkie, William J. M., M.A., Litt.D., LL.D., Tyrone House, Marlborough Street, Dublin.	Intermediate Education Board.
Taylor, Alexander, 131A Donegall Street, Belfast.	Belfast County Borough Council.
Wallace, William, J.P., Greenville, Blackrock, Co. Dublin.	Joint Committee of Councils of the Co. Dublin Urban Districts.

The Consultative Committee for co-ordinating educational administration, as constituted by Section 28 of the Act of 1899, consists of the Vice-President of the Department as Chairman, and one person appointed by each of the following bodies:—The Commissioners of National Education; the Intermediate Education Board; the Agricultural Board, and the Board of Technical Instruction.

The Committee in 1912-13 consisted of the following members:—

<i>Names and Addresses</i>	<i>By whom appointed</i>
Russell, The Right Hon. T.W., P.C., M.P., Vice-President of the Department of Agriculture and Technical Instruction, Dublin.	<i>Ex-officio.</i>
Starkie, William J. M., M.A., LL.D., LL.D., Tyrone House, Marlborough Street, Dublin.	The Commissioners of National Education.
Finlay, Rev. T. A., M.A., University Hall, Lower Hatch Street, Dublin.	The Intermediate Education Board.
McClelland, John A., M.A., D.Sc., F.R.S., Rostrevor, Orwell Road, Rathgar, Co. Dublin.	The Board of Technical Instruction.
Gill, T. P., Department of Agriculture and Technical Instruction, Dublin.	The Agricultural Board.

2.—FUNDS OF THE DEPARTMENT.

(a.) *Parliamentary Vote.*

In the Parliamentary Vote for the Department for 1912-13 provision was made for the salaries and expenses in connection with the institutions (other than the Institutions of Science and Art) and officers transferred from other Departments under Section 2 of the Agriculture and Technical Instruction (Ireland) Act of 1899, as well as for the salaries and expenses of officers appointed since 1st April, 1900. The Vote also contained the following Grants-in-Aid:—Cattle Pleuro-Pneumonia Account, including the grant for swine fever, foot and mouth disease and rabies work, £46,200; provision for agricultural purposes under Section 15 of the Act of 1899 and Section 49 of the Irish Land Act, 1909, £37,000 (this sum forms part of the Endowment Fund); provision for tobacco growing experiments, £6,000; for forestry operations, £6,000; and from the Development Fund:—for the improvement of horse-breeding, £10,000, for the purchase and development of areas for afforestation, £17,000, for agricultural research and advisory work, £5,000, and for fishery development, £24,200. The sums available for improvement

of horse-breeding and for agricultural research and advisory work were duly received and expended in full, but only £4,885 was expended out of the sum available for afforestation owing to delays in obtaining clear titles to suitable areas offered for purchase. With regard to fishery development work the amount required for expenditure on Helvick Harbour in the year was, owing to unavoidable delay in starting the work, less than the amount estimated, while operations at Kilkeel Harbour were postponed pending negotiations with the local authority as to plans. Consequently, the total expenditure under the head of fishery development, including, in addition to the works at Helvick, aid towards dredging small harbours, oyster fisheries, and experiments in motor boat fishing, was only £5,426 in the year. The sums unexpended on these services may, however, be re-inserted in the Parliamentary estimates for subsequent years.

The Parliamentary Vote for Science and Art, Ireland, was, for Treasury purposes, separated in 1912-13 from the general Vote for the Department. Provision was made therein for the salaries and expenses in connection with the Science and Art Institutions and Geological Survey of Ireland; for the purchase of specimens for the National Museum of Science and Art, £2,300; for the purchase of books for the National Library, £1,800; and for the purchase of apparatus and equipment for the Royal College of Science, £2,000.

This Vote also contains the grants for Science and Art Instruction in Ireland, payable to schools which adopt the Department's programme for experimental science, drawing, manual instruction, and domestic economy, and to technical schools and science and art schools and classes. The provision made for these purposes was £88,400, an increase of £80,650 on the corresponding provision for the previous year.

The expenditure in respect of the institutions maintained from the Parliamentary Vote of the Department during the year 1912-13 was as follows:—

Royal College of Science,	£23,846
National Museum of Science and Art,	13,911
National Library of Ireland,	5,645
Metropolitan School of Art,	4,716
Royal Botanic Gardens,	4,920
	<hr/>
	£53,038

The Geological Survey of Ireland was transferred to the Department in April, 1905, from the Board of Education, England. The expenditure on the survey in 1912-13 was £2,568.

(b.) Endowment Fund.

During the year ended 31st March, 1913, the whole of the Department's Annual Endowment Fund provided under the Agriculture and Technical Instruction (Ireland) Act, 1899, viz., £166,000, was duly received, together with a further annual sum of £3,000 under the terms of the Agriculture and Technical Instruction (Ireland) Act, No. 2, 1902. There was also received a sum of £19,000 under Section 49 of the Irish Land Act, 1900, in respect of the agricultural work of the Department in the congested districts. The amount received as interest arising out of securities held by the Department, and from moneys on deposit in the Bank of Ireland, was £7,108, and the interest received from loans for bulls, stallions, agricultural banks, etc., was £778.

(c.) The General Cattle Diseases Fund.

The General Cattle Diseases Fund was formed under the Contagious Diseases (Animals) Act of 1878 by assessment on the several Poor Law Unions in Ireland, mainly for the purpose of recouping to local authorities one-half of the expenditure incurred by them under the Diseases of Animals Acts, and by that means lessening the burden which might otherwise press unduly on particular localities, owing to the prevalence therein of contagious diseases of animals. It is also drawn upon to supplement the annual Grant-in-Aid of the Cattle Pleuro-Pneumonia Account in any year in which that grant proves insufficient to meet the expenditure of the central authority in dealing with pleuro-pneumonia, foot and mouth disease, rabies, and swine fever.

The Fund is replenished by assessments on the several counties and county boroughs in proportion to the net annual value of property therein. The total amount which may be levied on the several contributing bodies for the purposes of the Fund is limited by the Diseases of Animals Act of 1894 to a sum which, taken with any money carried to the Cattle Plague Account before the 30th September, 1878, is equivalent to a poundage of 8d. in the pound; and no larger sum may be levied at any one time than the equivalent of 1d. in the pound. Since the inception of the Fund a sum equivalent to a poundage rate of 7½d. in the pound has been levied in twenty-eight assessments, the last of which was dated the 1st January, 1913. An assessment at the rate of 1d. in the pound now yields approximately £16,450, and this sum would cover the normal expenditure, exclusive of expenditure on swine fever work in excess of the Parliamentary Grant, for a period of about eighteen months.

A proportion of the fines recovered in prosecutions for offences under the Diseases of Animals Acts is also carried to the credit of the General Cattle Diseases Fund, and the amount thus realised

covers certain miscellaneous expenses of the central authority such as the expenses incurred in the examination of carcasses washed ashore, etc., with which the Fund is also chargeable under Section 72 (4) of the Diseases of Animals Act of 1894.

3.—ADMINISTRATION OF THE ENDOWMENT FUND.

The Department's Endowment Fund for the year 1912-13 consisted of an annual income of £190,000 together with interest arising from loans and securities. (Details will be found on pages [16] to [18] of the Appendices). From this income a sum of £55,000 was set aside for the purposes of technical instruction, and £10,000 for sea fisheries. A provision of about £1,300 a year had also to be made for the payment of the superannuation allowances of certain persons formerly employed under the Commissioners of National Education, and for the travelling expenses of members of the Council of Agriculture, and of the two Boards established by the Act of 1899.

When the sums mentioned had been set aside for these purposes the balance, amounting to £123,700, constituted the annual sum applicable for "the purposes of agriculture and other rural industries, and sea fisheries." In addition to this annual income, certain capital sums, which amounted in all to £204,906, were placed at the disposal of the Department under Section 15 (e) and (g) of the Act of 1899. These sums and the unexpended balances of the annual income of the Endowment Fund during the initial years of the Department's existence were invested in Government securities which have been realised from time to time as required. The nominal or face value of the securities held on 31st March, 1913, including £20,000 Consols transferred from the Board of Works to the Department in April, 1904, in respect of the Sea and Coast Fisheries Loan Fund, was £186,446, and their cash value was £145,352. A sum of £10,824 was on deposit in the Bank of Ireland, and there was a cash balance of £29,564 to the credit of the Fund. The total assets of the Fund on 31st March, 1913, amounted to £185,246.

The liabilities in respect of sums specifically earmarked under Section 16 of the Act of 1899 were as follows:—For technical instruction in the six county boroughs, £41,421; for technical instruction in urban and rural districts, £4,048; for extension of special schemes of technical instruction, £4,172; for sea fisheries, £9,851; for

the sea and coast fisheries loan fund, £4,049; steam cruiser and dredger replacement funds, £10,498; and for the buildings and equipment of the Munster Institute an unexpended balance of £849 out of £10,000 provided under the Act of 1899. The total amount of these liabilities was, therefore, £74,388 on 31st March, 1913.

Deducting the liabilities from the assets, there remained a sum of £110,832 available for the purposes of agriculture and other rural industries and sea and inland fisheries. The latter sum has been allocated with the concurrence of the Agricultural Board, for various undertakings, such as the purchase of additional land in connection with the agricultural colleges and stations of the Department, the building and equipment of agricultural schools, loans for the purchase of bulls and stallions, agricultural implements, fencing materials, the erection of village halls, flax scutching mills, fruit growing, etc., agricultural work in conjunction with county committees, marine works, and the protection and development of sea and inland fisheries.

The net expenditure on the agricultural side of the Department's work in 1912-13, including grants of £10,500 for the purpose of providing instruction in manual work and domestic economy in rural districts, and £2,130 for mackerel curing experiments and branding of fish, was £163,731. The details of the expenditure are shown in the Appendices pages [10]-[13].

Under Section 16 (1) (c) of the Agriculture and Technical

FUNDS FOR TECHNICAL INSTRUCTION.	Instruction (Ireland) Act of 1899, the annual sum of £55,000, ear-marked for the purposes of technical instruction, is to be divided into two parts, one part of which must be distributed, in proportion to their
--	--

respective populations, among the county boroughs in aid of approved schemes of technical instruction, and the other part is applicable to schemes of technical instruction elsewhere than in county boroughs, and for certain other purposes mentioned in the Act, such as the collection of information for the purposes of technical instruction.

At the meeting of the Board of Technical Instruction held on the 31st May, 1912, the question of the fifth triennial division of the funds was considered, and the Board unanimously concurred in the Department's proposal that the arrangements made in respect of the fourth triennial period should be renewed for the fifth triennial period. Accordingly the allocation of funds for the three years ending 31st March, 1915, is as follows:—

For technical instruction in county boroughs,	£26,000.
For technical instruction elsewhere than in county boroughs, and for central purposes,	£29,000.

The Board, therefore, control the expenditure of an annual sum of £29,000, which is applicable for technical instruction elsewhere than in county boroughs, and for certain central purposes. The balance of the £55,000, viz., £26,000, allocated, with the concurrence of the Board, for technical instruction in the six county boroughs, is applied in aid of schemes in these boroughs subject to the approval of the Department alone. Out of the sum of £29,000 referred to, the Department, with the concurrence of the Board, set aside an annual sum of £4,000 for central purposes, e.g., for senior scholarship schemes, provision for training teachers, etc. The remaining £25,000 is distributed in aid of approved schemes of technical instruction in urban and county districts. Details of these schemes will be found in Part II. of the present Report, under the head of "Technical Instruction."

The Agricultural Board allocate each year a sum of £10,500 out of the funds administered with the concurrence of that Board, for Manual Instruction and Domestic Economy Classes in rural districts. Such classes are regarded as part of the general scheme of agricultural education, but, for administrative reasons, the Department have hitherto found it convenient to administer this sum with the concurrence of the Board of Technical Instruction. Classes in lace, crochet, shirt-making, farriery, and other rural industries, are also financed from the money, controlled by the Agricultural Board, the amount voted in 1912-13 for these special purposes being £8,000.

The grant in aid of technical instruction, commonly known as the "Equivalent Grant" which amounted to £7,000 a year, and was formerly payable from the Ireland Development Grant, is now merged in the Parliamentary Vote for annual grants to schools and classes of science and art and technical instruction.

The total of the sums available from the Endowment Fund in 1912-13 for technical instruction in non-agricultural subjects was £66,330,* exclusive of the balance of £55,029 brought forward from the year 1911-12. The expenditure was £71,718, of which £26,956 was paid to the county boroughs. The amount of the balance carried forward to the year 1913-14 was £49,641, and comprised £41,421, accrued in respect of technical instruction schemes in county boroughs, and £8,220 ear-marked, as stated above, for schemes in urban districts and the extension of special schemes, such as the establishment of trade preparatory schools, special courses of instruction for masters and foremen in trades, and summer courses for teachers of elementary science, drawing, manual instruction, and domestic economy.

*This amount does not include the provision of £85,400 made in the Parliamentary Vote, as stated on page 8, for grants to schools and classes of science and art and technical instruction. The distribution of these grants is shown on pages [190]-[225] of the Appendices.

Under Section 16 (d) of the Act a provision of £10,000 is to be made each year for the purposes of sea fisheries. This sum was supplemented by a grant of £2,130 for mackerel curing experiments and branding of fish from the funds controlled by the Agricultural Board.

The total sum available for these purposes in 1912-13, including the balance carried forward from 1911-12 and sundry receipts, was £30,623. The gross expenditure was £30,672, of which £1,866 was spent on marine works and dredging. Further information regarding marine works, the patrol of the fishing grounds, and the investigations carried on at the marine laboratory and oyster beds at Ardara, the cost of which is defrayed from this fund, is given in the Department's Annual Report on the Sea and Inland Fisheries of Ireland.

The portion of the Sea and Coast Fisheries Fund reserved by the Purchase of Land (Ireland) Act, 1891, for expenditure elsewhere than in congested districts counties, which remained vested in the Commissioners of Public Works, was transferred to the Department under an Order in Council dated 24th March, 1904, in accordance with the terms of Section 15 (c) of the Agriculture and Technical Instruction (Ireland) Act, 1899.

The Sea and Coast Fisheries Fund was the residue of a sum collected by public subscription for the relief of distress in Ireland in the year 1822. This sum was vested in trustees known as the "Trustees to Aid Sea and Coast Fisheries of Ireland." By the Act 27 and 48 Vic., c. 21, the fund was transferred to the Commissioners of Public Works, who were authorised to make fishery loans therefrom to such persons, and upon such security, as the Inspectors of Irish Fisheries should recommend. By the Purchase of Land (Ireland) Act, 1891 (54 and 55 Vic., c. 48), the fund was transferred to the Congested Districts Board, save £20,000, which was reserved for the purpose of loans in non-congested districts under the same terms as obtained before the passing of that Act.

By the Agriculture and Technical Instruction (Ireland) Act, 1899, this sum of £20,000—or what it was then represented by in cash, investments and outstanding loans—was placed at the disposal of the Department. It was not, however, actually transferred until 1st April, 1904, when the Department received from the Commissioners of Public Works £1,521 19s. 6d. in cash, £20,000 in Consols, and promissory notes to the amount of £7,700, inclusive of arrears and irrecoverable balances.

During the year ended 31st March, 1913, eighty-three applications for new loans were favourably considered by the Department, and a sum of £11,556 was issued for the purchase and repair of fishing boats and gear. The manner in which

these loans are repaid continues to be satisfactory. The details of the transactions are published in the Department's Annual Report on the Sea and Inland Fisheries of Ireland.

4.—CENTRAL INSTITUTIONS.

As was mentioned in last year's Report the work of the Royal College of Science for Ireland is now conducted in the new buildings in Upper Merrion Street, Dublin, and the change from the old premises in Stephen's Green has permitted the expansion of many branches of the College work which had hitherto suffered for want of the necessary space. During the past year increased equipment has been provided in the different laboratories. Especially notable are the additions in the Engineering Division, where an extensive plant illustrating the most recent progress in machines, engines and testing appliances has been laid down. It is expected that during the coming year the complete new plant dealing with all the aspects of Mechanical Engineering will be in full operation. The commodious laboratories in every Division of the College have greatly facilitated experimental work and have admitted of the utilisation of the full equipment. The use made of them for research in general is apparent from the details given in the Forty-fourth Annual Report of the Dean and Council, which is printed at page [254] of the Appendices. The work done led to many results of scientific interest, and included special investigations of industrial importance. This branch of the College activities is scarcely less important than the regular professional courses and its continuous development must be regarded as eminently satisfactory.

The number of students attending the College during the Session 1912-13 was 189, of whom 84 were non-Associate Students. The Associate Students included 4 Royal Scholars, 15 Science Scholars, 33 Agricultural Scholars (including 2 in Horticulture, 1 in Forestry and 1 in Creamery Management), and 14 Teachers-in-Training. In addition there were 1 Local Exhibitioner, 3 Research Students and 4 Post-Graduate Scholars doing Research work. At the end of the Session 11 students were awarded the Associate Diploma of the College, 3 in the Faculty of Agriculture, 1 in the Faculty of Agriculture (Forestry), 4 in the Faculty of Engineering, and 3 in Science Courses for Teachers-in-Training, viz., 1 in Chemistry Section, and 2 in the Natural Science Section.

Of the 485 teachers who followed the short Summer Courses organised by the Department in 1913, 299 attended at the Royal College of Science. These courses, which are mainly intended for the further training of teachers working under the Department's Programme of Experimental Science, Drawing and Manual Instruction for Day Secondary Schools

were held last year at four centres, and as will be noted the College was utilised as the chief centre of instruction and full advantage was taken of its resources and equipment.

The scheme under which a four years' course of study must be followed in all Faculties is now in operation at the College, and is compulsory on new entrants who desire to secure the College Diploma.

Of the additions to the Art and Industrial Division during the year special mention may be made of a case of electrotypes and casts illustrating Minoan Art, the art belonging to the earliest European civilisation, which has been arranged in connection with the Greek and Roman Collections. The selection of the objects for reproduction was made with the assistance of the Rev. Professor Browne, of the National University, and in such a way as to be of great use to architects and to students of classical archaeology. Hitherto persons desiring to see originals or facsimiles of remains of Minoan art would have found it necessary to visit many European capitals. Copies are now collected in a fairly complete manner in the Museum, and the exhibit gives a tolerable idea of the advanced state of the culture it illustrates, which is believed to have reached its zenith as far back as the second millennium before the Christian Era.

An exhibition of relics of the Irish Volunteers has been arranged in the Main Court of the Museum. The objects secured at the recent sale of the Robert Day Collection are a striking feature of the exhibition. These consist of gold and silver medals and silver and brass breastplates and gorgets. There are also tunics, helmets, swords and pistols, about a dozen flags and guidons and three drums. Most of the objects are from provincial corps, but a good many are identified with the numerous corps which existed in the metropolis. Exhibited with these are oil paintings, engravings and other prints, and some miscellaneous documents illustrating prominent events in the Volunteer Movement.

To the Irish Antiquities Division a large number of additions have been made, both by purchase and gift, and by transfer from the Royal Irish Academy. Amongst the acquisitions was the largest bronze rapier yet found in Western Europe. This fine specimen came from County Derry. The Division also secured an interesting set of copper celts which were found in the Co. Cork, and spearheads, swords, etc., from Co. Fermanagh and Co. Cavan. The fine collection of Medals belonging to the Royal Irish Academy is now available for study.

In the Natural History Division the collection of Irish Fauna in the lower hall has been re-arranged. The acquisitions in the Division were very numerous and included a fine

specimen of Reindeer, a collection of Rotifers, Japanese, British and Irish Bird skins, and Chinese Mammal skins.

The collection of Minerals has been enriched to a considerable extent by purchases made during the year. Among the additions were portion of an Iron Meteorite found in German South-west Africa, and a set of Meteoric Stones which fell in Arizona in 1912.

A valuable herbarium consisting of some 2,000 specimens collected by the late Mr. Vowel, was presented to the Botanical Section during the year. The work of identifying specimens for teachers and students has been continued on a larger scale than in previous years, thus showing the increasing usefulness of the Museum Collections. Many additions have been made to the collection of Fossil plants. The arrangement of the models of type flowers is now complete.

There has been a continuous increase in the number of students making regular use of the various sections of the Museum.

Attendances of readers during the year numbered 190,657, a decrease of 6,091 on 1911-12, when, however, the working year was slightly longer.

NATIONAL LIBRARY OF IRELAND. The volumes added to the Library number 4,471. The Bibliography of Irish Philology and of Printed Irish Literature, an important work begun some nine years ago, has recently been completed and issued. Work on the Printed Catalogue and the Printed Subject Index has been pushed forward duly. Progress has been made in binding and cataloguing the large collection of Miscellaneous Maps. Useful improvements in the building have been carried out. The Library's loss by the death of Professor Dowden is specially noted in the Trustees' Report. The Library owes valuable donations to the continued generosity of Mr. Henry Harden, LL.B., and of the late Mr. Pierpont Morgan.

There has been little alteration in the indoor department of the gardens this year. Necessary painting and repairs have been carried out in the dwelling houses and offices, in the cactus house No. 8, and the camellia house, No. 9. The large brick pits in the nursery yards were thoroughly overhauled. Outdoor there has been much activity. Considerable additions have been made to the rockwork for Alpine plants, large sections which were defective have been reconstructed, and a new moraine bed has been added. These improvements will tend to the easier and better cultivation of the plants. The process of clearing out duplicates to make room for new species of trees and shrubs has been continued, and a number of young trees from the nursery have been planted in their permanent positions in the grounds. The gardens suffered much from the severe drought between June

and September. The weevil alluded to in last year's Report continues to cause great damage amongst the outdoor ferns. More than half the collection has been destroyed and remedial measures have proved ineffective.

The Metropolitan School of Art was attended, during the Session 1912-13, by 357 students, of whom
 METROPOLITAN 207 attended the evening classes. The day
 SCHOOL OF ART. classes were attended by 186 students,
 86 of whom also attended evening classes.

In the National Art Competition of 1913, works submitted by students of the school were awarded one gold medal, one silver medal, eight bronze medals and four book prizes, whilst twenty-nine other works were commended by the examiners. The Department regret having to record the death during the year of Mrs. Barden, Assistant Art Mistress, after a connection with the school extending over thirty-four years. They also regret the resignation of Mr. Frederick Luke, Second Master of the School, and of Mr. Michael J. Buckley, Teacher of Mechanical Drawing. Mr. Luke resigned his post, under Treasury regulations, after thirty-six years of meritorious service, and Mr. Buckley, who had been a member of the staff for nineteen years, resigned upon being appointed to the important position of City Engineer to the Corporation of Dublin. The new class rooms for modelling and craft classes were handed over to the school during the session, and the congestion in the main building has consequently been much relieved.

During the year 1912-13 the Geological Survey of Ireland continued the mapping of areas in North-west Ireland on the scale of six inches to one mile. The examination of the glacial deposits of the Kenmare area, for the new edition of the Memoir on the

GEOLOGICAL
 SURVEY
 OF IRELAND.

country south of Killarney, was completed. A detailed investigation of the horizons on which coal occurs in the Leinster Coalfield was begun, in order to correlate the results of several new borings. Guidance was given to a party of the Geologists' Association on a geological visit to the counties of Mayo and Sligo in the summer of 1912. A number of soils were investigated, particularly in reference to certain local failures of oat crops in western Ireland.

5.—MISCELLANEOUS.

During the past year considerable progress was made in the working of the various schemes and experiments for the purposes of which advances have been obtained by the Department from the Development Commissioners appointed under the Development and Road Improvement Funds Act, 1909.

THE DEVELOPMENT
 ACT.

Forestry.—Reference has been made in previous reports to the advance of £25,000 sanctioned for the purchase of afforestation areas. Of these areas, possession has been obtained of 6,740 acres; negotiations in connection with the remaining lands are proceeding. Applications for advances for the working of the areas acquired have been submitted to the Development Commissioners.

Technical and Advisory Work.—This scheme is financed partly from the Development Fund and partly from the Department's Endowment Fund. The full amount of the advance sanctioned from the Development Fund for the purposes of the scheme is a grant of £5,000 renewable annually. This amount has been made available in respect of the financial years 1912-13 and 1913-14. Application for a similar sum for the financial year 1914-15 has been made. At the request of the Department the Treasury have agreed to advance the amount required for the year 1913-14 and any future amounts as grants-in-aid. An account of the work done in connection with the scheme will be found in the part of the Report which deals in detail with the Department's operations in connection with agriculture (see pages 84-92.)

Horse-breeding.—The grant of £10,000 from the Development Fund for the purposes of the Department's Horse-breeding schemes was renewed in respect of the financial year 1913-14. This amount is now advanced as a grant-in-aid. The working of the schemes is described in the part of this Report which deals specifically with the agricultural operations of the Department (see page 58).

Tobacco.—As mentioned in the Report for 1911-12, advances not exceeding £35,000 for the purpose of further experiments in tobacco production in Ireland have been sanctioned. The question of approving advances for an extension of these experiments was under consideration by the Treasury at the close of the year under review. The experiments which are designed to cover a period of ten years will, it is expected, begin in 1914. The money from the Development Fund will be advanced annually to the Department, as required.

Fisheries.—During the year under review progress has been made with the construction of a harbour at Helvick, and financial and other assistance has been given to schemes for dredging fishing harbours, for the development of motor-boat fishing and for the improvement of the oyster fisheries. As was mentioned in last year's Report, these are schemes for which grants have been made out of the Development Fund. The scheme for Kilkeel Harbour, for which a grant was also sanctioned, has been the subject of prolonged discussion by the Down County Council. As a result work was not commenced at Kilkeel during the year.

At the request of the Treasury, the Department furnished the Development Commissioners with reports on applications for advances from the Boards of Conservators of Fisheries for the Ballina, Bangor, Galway, Lismore, Londonderry and Sligo districts.

Reports were also submitted by the Department in regard to an application by the Kildare County Council for an advance from the Development Fund towards the cost of maintaining woodlands acquired by the Council, on an application for a grant for the construction of the Claudy to Gortin section of a proposed railway between Londonderry and Cookstown, and on an application by the Boyne Navigation Company for an advance to enable them to keep the navigation of the river open.

Upon the suppression of the outbreak of Foot and Mouth Disease last year, the Department considered it essential to review the whole situation in Ireland so far as concerned veterinary administration and education.

In this general survey of the situation it was necessary to consider the position of the Royal Veterinary College of Ireland. The College was founded by Letters Patent of the 27th May, 1895, but no funds were made available until the establishment of the Department. It was administered by a Board of Governors consisting of forty members, of whom twelve were appointed by the Crown, thirteen by the Department, and fifteen by the Royal Dublin Society. In the Agriculture and Technical Instruction (Ireland) Act, 1899, a capital sum of £15,000 was provided for the buildings and equipment of the College, and in addition to this sum the Department have from time to time made advances for the purposes mentioned to a total amount of £12,850. The College has been receiving from the Department a sum of £200 per annum for research work, and has been earning grants under the revised regulations for science classes. But by far the greater part of its revenue was derived from students' fees—a source necessarily fluctuating and uncertain. Its financial position is not, therefore, sufficiently assured to admit of necessary development as regards staff and equipment.

Conferences took place during the past year between the Board of Governors and the Department. Proposals for the taking over by the Department of entire financial and administrative responsibility in regard to the College were put forward, and as a result the Governors have made application to the Crown for a new Charter to enable the Department to assume control of the College and to manage it in the same manner as they manage other of their educational institutions, such as the Royal College of Science, the Albert College, Glasnevin, and the Munster Institute. The proposals include the retention

as an advisory body, of the existing Board of Governors who have kindly consented, should the suggested arrangement be carried out, to afford the Department and the College the benefit of their advice and experience.

During the past year the Department have brought into force their Tuberculosis (Ireland) Order, 1913. This measure aims at the stamping out of tuberculosis among Irish livestock, and provides for the special treatment of the milk of cows suspected of being affected by the disease. The Order, which came into force on 2nd June last, provides for the slaughter by Irish Local Authorities under the Diseases of Animals Acts of any cow which they are satisfied is giving tuberculous milk or suffering from tuberculosis of the udder, or of any bovine animal suffering from tuberculosis with emaciation. Provision is made for the payment of compensation to the owner of each animal so slaughtered. The amount of compensation depends on the result of the *post mortem* examination, quarter value being payable in cases of advanced tuberculosis and three-quarters in cases where the disease has not made much headway. Full value plus £1 is paid when the animal slaughtered is found not to have been suffering from the disease.

For five years annual Exchequer grants will enable the Department to recoup Local Authorities one-half the net amount of their expenditure under the head of compensation. The other half will be claimable from the General Cattle Diseases Fund, as well as one-half the amount of any other approved expenditure (salaries, allowances or incidental expenses) in connection with the Order.

With few exceptions the Local Authorities have been found ready to give effect to the Order in a satisfactory manner. Throughout the greater part of Ireland its advantages are now either available or in a fair way of being shortly made available to the owners of animals affected with tuberculosis, and the Department trust that the ultimate effect of the Order when it comes more fully into operation and its provisions are better understood, will be to improve still further the admittedly high health standard of Irish herds.

An Order of a similar nature came into force in Great Britain on the 1st May, 1913.

The Department have been advised that under the Application of Enactments Order of 1898, members of Committees established under Section 14 of the Agriculture and Technical Instruction (Ireland) Act, 1899, as well as members of the County Councils which appoint these Committees are debarred from obtaining, directly or indirectly, financial benefit from any schemes administered by the Committees. Members of such bodies are consequently disqualified

APPLICATION OF
ENACTMENTS
ORDER OF LOCAL
GOVERNMENT
(IRELAND)
ACT, 1898.

from securing nominations for mares, and from obtaining payment of fees or premiums in respect of stallions, bulls, boars, etc. Those desiring to take advantage of the various schemes in this manner must resign membership of the Council or Committee making the awards. The Department have communicated with all the Committees in the matter. Only a small percentage of members of Co. Committees or Co. Councils are likely to be affected by this decision, and the Department do not anticipate that the working of the schemes in the future will be attended by any serious difficulties owing to the disqualification of such members. The idea underlying the Application of Enactments Order is undoubtedly sound—that members of statutory local bodies being in the position of trustees for the public should not use their fiduciary position to obtain any direct financial benefit from the funds administered by them.

As intimated in their last Report, the Department have given careful consideration to the question of the credit and capital available for rural classes in Ireland, with a view to ascertaining not only what improvements may be

AGRICULTURAL CREDIT.

called for in the existing system of co-operative credit societies, but also the forms of credit which seem best suited to the requirements of the new tenant purchasers under the Land Acts.

The following Committee of Inquiry was, with the consent of the Treasury, appointed by the Vice-President:—

- GEORGE MURNAGHAN, Esq., J.P. (who acted as a Member of the Irish Poor Law Commission), Chairman.
 ROBERT KYLE KNOX, Esq., LL.D. (late Chairman of the Board of Directors of the Northern Banking Company, Limited).
 CHARLES F. BASTABLE, Esq., M.A., LL.D., Professor of Political Economy, and Regius Professor of Laws, Dublin University.
 The Right Honble. WILLIAM F. BAILEY, O.B., one of the Estates Commissioners for Ireland.
 Reverend THOMAS A. FINLAY, M.A., Vice-President of the Irish Agricultural Organisation Society, and Professor of Economics in the National University of Ireland.
 SIR ROBERT ANDERSON, Bart., J.P. (of the firm of Messrs. Anderson and Macaulay, Belfast).
 WALTER MACMORROGH KAVANAGH, Esq., D.L.
 THOMAS PATRICK GILL, Esq., Secretary of the Department of Agriculture and Technical Instruction for Ireland.

The following were the terms of reference to this Committee:—

"To inquire into the existing system of credit available for the rural classes in Ireland; to suggest what, if any, improvements, not involving financial assistance from the Exchequer, should be made in the system; and to consider especially the form of agricultural credit most suitable to the requirements of the occupiers of land affected by the Land Acts in the western districts, and throughout the country generally."

The Committee have held numerous public sittings in various parts of the country for the reception of evidence. They hope to submit their Report to the Department early in 1914.

Special attention is being paid to the making of lime throughout the country. Alterations have been suggested in the case of some of the working lime kilns with satisfactory results. IRISH MINERALS AND RAW MATERIALS. Investigations have been made with regard to the occurrence of limestone suitable for lime burning. A large number of samples of limestone have also been subjected to examination.

A report has been made by the Department's Economic Geologist on the Slieve Ardagh Coal Fields, Co. Tipperary.

A large number of inquiries regarding the mineral, raw material and peat deposits of the country have been received and dealt with.

Under the provisions of the Department's Village Libraries Scheme, grants of books on technical subjects were given during the year to a number of libraries at small rural centres. GRANTS OF BOOKS TO VILLAGE LIBRARIES. Some of these were newly established libraries to whose initial efforts the Department's gifts were a helpful stimulus. The operation of the scheme is confined to libraries established by small village communities, and a grant is only authorised where the Department are satisfied that the library is being worked in an efficient manner under the management of a competent committee, and can be of assistance locally to the agricultural and technical instruction schemes. The list of books from which donations to libraries may be selected includes works on general agriculture, soils, live stock, dairying, poultry-keeping, horticulture, forestry, botany, bee-keeping, domestic economy, rural science, etc. Grants of books are limited to £8 in value.

PART II.—DETAILS OF THE DEPARTMENT'S OPERATIONS, 1912-13.

I.—AGRICULTURE.

The period covered by this part of the Report is the agricultural year ended 30th September, 1913.

During this period no change was made by the Department in their method of recoupment to local authorities in respect of expenditure under agricultural schemes.

(a) AGRICULTURAL INSTRUCTION.

Save in seven counties in which the county committees of agriculture made no provision for instruction in home butter-making, the several schemes of itinerant instruction for 1912-13 were in operation in every county. The number of instructors engaged in connection with these schemes during the past year and the previous year was as follows:—

		1911-12	1912-13
Scheme of Instruction in Agriculture	..	43	45
" Horticulture and	..		
" Bee-keeping	..	40	40
" Poultry-keeping	..	36	36
" Butter-making	..	33	35
Total	..	152	156

As 21 instructors in poultry-keeping also filled the position of instructors in butter-making, the duties of the 156 positions above-mentioned were performed by 135 persons.

The extent to which the services of the instructors were made use of is shown in the following table:—

	Agriculture		Horticulture and Bee-keeping		Poultry-keeping		Butter-making	
	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13
No. of lectures delivered	642	627	206	190	263	144	191	131
Estimated attendance at lectures	24,000	28,180	10,000	7,600	18,200	10,061	3,063	1,682
No. of courses conducted	70*	81*	NIL	NIL	124	131	224	213
No. of students admitted to courses	1,405	1,344	NIL	NIL	1,327	1,778	1,792	1,863
No. of visits to farms, gardens, dairies, etc.	10,808	17,065	33,501	34,815	15,905	15,167	7,419	6,286
No. of demonstration plots	2,113	2,003	354	372	—	—	—	—
No. of field experiments	744	760	—	—	—	—	—	—

One teacher was employed specially for these classes, in addition to the county instructors.

In addition to the above-mentioned instructors the Meath county committee appointed one agricultural overseer, and the Limerick county committee employed two tillage demonstrators. These officers are dealt with later on in connection with the scheme of instruction in agriculture. There were, accordingly, 188 persons engaged by county committees for the purposes of the various agricultural schemes during 1912-13.

The instructors employed by local authorities under county agricultural schemes are occupied principally in performing the work mentioned in the foregoing table, but in addition they are called upon to discharge other responsible duties of a varied character. Particulars of all such duties are given in the agricultural schemes which will be found in the appendices to this Report.

In connection with the schemes administered directly by the Department there were employed in the western congested counties during the year 1912-13 a total of 49 assistant agricultural overseers, under the supervision of 4 principal overseers. These officers are appointed by the Department and are occupied in performing over limited districts duties analogous to many of the duties of a county instructor. The assistant overseers, living in a convenient centre within an area peopled by small farmers whose holdings have been enlarged or who have been migrated to new holdings under recent land legislation, are consulted by tenant purchasers residing in the immediate neighbourhood with regard to all matters pertaining to the cultivation of the land and the management of stock.

Within the past year these assistant overseers carried out a total of 12,391 demonstrations with various crops and fertilisers, details of which will be found on page 41 of this Report.

The Department's instructors in dairying, 8 in number, made 2,024 visits during 1912-13 to creameries under the provisions of the scheme for encouraging improvement in the management of creameries.

Agricultural training in accordance with courses approved by the Department was provided at twenty agricultural schools and colleges. Nine of these schools (seven for male students and two for female students) were managed directly by the Department; the remaining eleven schools, of which only two were for male students, were under other management. The only new school opened during the year was the Antrim Agricultural School. At this school, which is managed by the Antrim county committee of agriculture, accommodation is provided for twenty-five male students. A school or house committee, which is composed of representatives of the committees of agriculture for counties Antrim and Down, and of the Governors of the Henry Trust for agricultural education in county Down, supervise the management of the institution.

The erection of the buildings for the North-West Agricultural School at Ballycolman, Strabane, was completed, and at the

conclusion of the year under review arrangements were being made for the opening of the institution early in 1914.

The number of places filled by resident pupils at agricultural institutions during the years 1910-11, 1911-12, and 1912-13 is shown in the following table:—

Male Students.		1910-11	1911-12	1912-13
Institutions under Department's management (7)	.. ..	176*	169*	176*
Institutions under private management (2)	.. ..	20	26	35
TOTAL	.. ..	196	195	211
Female Students.				
Institutions under Department's management (2)	.. ..	104	106	103
Institutions under private management (9)†	.. ..	122	135	136
TOTAL	.. ..	226†	241†	239†
TOTAL OF MALE AND FEMALE STUDENTS.		422	436	450

* Includes students for whom maintenance allowances were provided instead of residential accommodation at the Department's institutions.

† At the Department's institutions for female students four sessions are held annually, and at private institutions two sessions annually. The number of places filled throughout the year, as shown above, is, therefore, much less than the number of pupils admitted to the courses.

‡ Two of the nine schools for girls, which are under private management, receive day pupils only.

Students wishing to become qualified to act as county instructors or teachers in agricultural schools can obtain training at certain of the Department's institutions, *e.g.*, the Agricultural Faculty of the Royal College of Science, Dublin, and the Albert Agricultural College, Glasnevin, for male students; and the Munster Institute, Cork, for female students. Of the students who were trained at these institutions, one hundred and fifty-five are at present employed on the Department's staff or as county instructors or teachers.

The scholarships in connection with the Agricultural Faculty offered in 1912 by the Department were made tenable for four years in consequence of the extension to a like period of the course necessary to be taken out in order to obtain the diploma of the College.

Eight of the students who completed the three years course of training in June, 1912, and who obtained the College Associateship in Agriculture received appointments during 1912-13 in connection with the Department's educational schemes.

Ninety-one candidates sat at the examination for scholarships in the faculty of agriculture, held in August, 1912, in accordance with the terms of the prospectus printed in the Appendices

page [27]. Thirteen new scholarships, eleven in agriculture and two in horticulture, were awarded on the results of the examination. None of the candidates in creamery management or forestry reached the qualifying standard. Nineteen scholarships awarded in the previous year, viz., seventeen in agriculture, one in creamery management and one in forestry, were renewed in full for the 1912-13 session. In addition a student who had attended two sessions at the College at his own expense was awarded a scholarship for the third year course. There was one fee-paying associate student in the faculty during the session.

The total number of students in the faculty at the close of the session in June, 1913, was—

First Year	..	..	..	13
Second „	..	..	..	12
Third „	..	..	..	9

34

Three of the four students who decided to take out a post-graduate course during 1912-13, were still attached to the College in June, 1913. The fourth student obtained an appointment in 1912-13 in connection with the Department's agricultural work.

The nine third year students passed the examination at the conclusion of their third session at the college and their scholarships were renewed for a fourth year.

Since the establishment of the Agricultural Faculty in the college up to the end of the last session eighty-seven students who entered as Departmental scholars had completed their training, and of these sixty-five at present hold appointments in connection with the Department's agricultural operations as follows: thirty-nine occupy the position of county instructor in agriculture; three act as teachers of agricultural classes; eleven are engaged in the Department's colleges and stations, and twelve are employed on the Department's central staff.

The session for 1912-13 began on the 8th October, 1912, and terminated for agricultural students on the 8th August, 1913, and for horticultural students on the 30th September, 1913.

ALBERT
AGRICULTURAL
COLLEGE.

The objects for which the courses at this college are designed have been explained in former Reports; further particulars together with programmes of the entrance examination will be found in the Appendices, pages [29] to [32].

The entrance examination for agricultural students was held on the 11th September, 1912. Fifty-six candidates presented themselves for examination; thirty of these, all but two of whom were sons of farmers, were adjudged to have passed, and were accordingly admitted. In addition, six other students who qualified for entrance on the results of their answering at

the scholarship examination held at the Royal College of Science in the previous month were admitted, thus making a total of thirty-six students who joined for the past session. A student who had taken out the agricultural course at the college prior to 1911-12 was appointed teaching student for the year 1912-13. Of the candidates who were successful at the scholarship examination above-mentioned eight had taken out the course of training at the Albert Agricultural College.

On the 8th August, 1912, fourteen applicants attended the entrance examination in connection with the horticultural course, and of these six qualified. A seventh student was admitted on his answering at an examination to which he had been submitted a short time previously by the Department to test his fitness for the appointment of horticultural instructor. Two of the students who had attended the previous session were re-admitted. The number of horticultural students for the 1912-13 session accordingly was nine, viz., seven first-year and two second-year students.

The students in the horticultural class were submitted to an examination at the termination of the session, and as a result four of the students, viz., two of the second-year and two of the first-year class were approved as qualified for the position of county instructor, and three first-year students were re-admitted for a second year's course. One of the four students who qualified as above has been appointed to an instructorship under a county committee of agriculture, and another has been employed directly by the Department. Thirty-three men trained in this school are now engaged in connection with horticultural schemes either under local authorities or immediately under the Department.

The number of candidates for admission to and the number of students in residence at the college for each of the last three years is as follows:—

	Candidates			Students in Residence		
	1910-11	1911-12	1912-13	1910-11	1911-12	1912-13
Agricultural course,	71	67	56	35	35	36
Horticultural course,	17	15	14	9	8	9
Royal College of Science course	—	—	—	15	15	15
TOTALS,	88	82	70	59	58	60

Twenty-two apprentices were admitted to the Athenry agricultural station for the 1912-13 session, extending from the 1st November, 1912, to October, 1913.

AGRICULTURAL STATIONS. Six of these were students who had attended during the preceding session. Although the courses given at this station

continue to be mainly practical in character, arrangements were made by which a greater amount of class instruction was provided for apprentices at the 1912-13 session than had been given at previous sessions. Two hours daily were devoted to class-room instruction, and, in addition, when the weather permitted, students were given outdoor instruction daily in subjects such as weighing of cattle, judging stock, estimating weights of crops, surveying, etc.

At Ballyhaise agricultural station the session extended from the 8th October, 1912, to the 8th August, 1913. This course was divided into two terms, the winter term from the opening of the session to the 19th March, 1913, and the summer term from the 1st April, 1913, to the close of the session. Eighteen apprentices were admitted at the opening of the session, one being the holder of a scholarship from the Meath county committee of agriculture, and sixteen of these remained for the summer term.

The special course of instruction in creamery management at this station was conducted from October, 1912, to March, 1913. Forty-one candidates attended the entrance examination for this course, and of these thirteen were admitted. Two of these entered as holders of free places provided by the Department for *bona fide* managers of creameries or auxiliary creameries of at least three years' standing. In such cases the full fee is lodged by the student on entrance, on the understanding that it will be returned at the conclusion of the course provided the Department are satisfied that full advantage is taken of the instruction. All the thirteen students who joined the creamery course attended the examination in technical subjects as applied to creamery management, held in March, 1913; five passed in all the subjects and were awarded certificates under the Department's scheme for improvement in the management of creameries, one passed in four subjects and two passed in three subjects of the examination. Four of the students at the session in question availed themselves of the opportunities offered by the Department for further practical training at selected creameries.

Cheese-making was carried out at the station during the year 1912-13. Brief details of the results of the cheese-making are given at page 81 of this Report.

The session at Clonakilty agricultural station lasted from October, 1912, to August, 1913. Twenty-eight apprentices were admitted. Six of these were holders of scholarships value £20 each, provided by the county committees of agriculture of the following counties: Kilkenny, Tipperary (N.R.), Wexford.

Competition was confined to students who had attended winter agricultural classes in the respective counties during the session 1912-13 and the scholarships were awarded by the county committees on the results of special examinations held by the Department.

Provision for similar scholarships for the 1913-14 session has already been made by the committees of agriculture in ten counties.

The total number of students, including paid apprentices at agricultural stations for the past four years was as follows :—

	1909-10	1910-11	1911-12	1912-13
Athenry,	12	12	12	22
Ballyheale,	39	38	35	31
Clonsilla,	30	30	30	28
	81	80	77	81

The percentage of agricultural students of each class at the three stations during these years was as follows :—

Valuation of Parents' Holding	Percentage of Total Agricultural Students			
	1909-10	1910-11	1911-12	1912-13
Sons of farmers the annual valuation of whose holding was :—				
Under £20	31	27	34	39
Between £20 and £40	26	28	42	27
„ £40 and £100	17	19	18	23
Over £100	20	20	2	8
Sons of persons other than farmers	6	6	4	4
	100	100	100	100

Of the sixty-eight agricultural apprentices admitted to the 1912-13 session thirty-three had already taken out a course of instruction under the Department's scheme of winter agricultural classes. Sixty-six per cent. of these apprentices were the sons of farmers the poor law valuation of whose holdings did not exceed £40.

The course at this school, which is under the management of the Franciscan Brothers, extended from the 1st October, 1912, to the 31st July, 1913. The farm is well stocked with modern machinery and implements, and the class-rooms are equipped for the teaching of elementary science in its bearings on agriculture. During the year 1912-13

MOUNT BELLEW
AGRICULTURAL
COLLEGE.

twenty-five students (including one day student) were admitted to the school. Of these five were holders of scholarships provided by county committees of agriculture, viz., four by the Galway county committee and one by the Mayo county committee. Nine others held scholarships provided by the Department. The county committees of agriculture of Galway, Mayo and Sligo have made provision for similar scholarships at the 1913-14 session.

Lectures to farmers in the Mount Bellew district on matters such as seeds, manures, rotation of crops, etc., were continued during the year 1912-13 by the staff of the college. A keen interest was taken in these lectures by the occupying tenants in the neighbourhood, the average attendance for the course being twenty-four. Experiments in the manuring of potato crops were carried out on their farms by twelve of those who attended the lectures, and prizes were offered by the college for the best-kept plots.

The first session at the school (see page [89] of the Appendices for the prospectus) opened on the 8th October, 1912, and concluded on the 8th August, 1913. Eleven students, eight from county Antrim and three from county Down were admitted, and all continued in attendance until the close of the session. Instruction was given in agriculture (theory and practice), veterinary hygiene, practical horticulture, bee-keeping, poultry-keeping, and butter-making. During the session under review—the first held at the school—the progress made by the students was, on the whole, very satisfactory.

The responsibility for the management and maintenance of the school rests with the Antrim county committee of agriculture, who are assisted in the supervision of the working of the establishment by a school committee consisting of eight persons of whom six are representatives of the Antrim county committee, one represents the Down county committee, and one the Governors of the Henry Trust.

At the close of the year under review the building of the school proper had been completed, and the Superintendent's residence was approaching completion. It is intended to open the school early in the year 1914.

AGRICULTURAL
SCHOOL FOR
NORTH-WEST
ULSTER.

As stated in the Department's Annual Report for 1911-12, courses of instruction in agriculture for young men, and in domestic economy for young women will be provided alternately accommodation for twenty-four students in all being available. The Department are bearing the cost of erection of the buildings, providing the equipment, furniture, etc.; the Department will also appoint and pay the staff,

and, generally, manage the school. The county committee of agriculture concerned, viz., those of Donegal, Londonderry and Tyrone, have appointed a small advisory committee in connection with the management. Each of the county committees mentioned has set aside funds in respect of the attendance at the school during the year 1914 of students from their counties. Preference will be given to those applicants for admission who have satisfactorily attended courses of instruction under the committee's schemes for classes in agriculture, poultry-keeping and hutter-making.

This scheme differed only slightly from that for 1911-12. (For particulars see page [76] of the Appendices.) It was put into operation by twenty-eight county committees of agriculture, and classes were formed at eighty-one centres. The total number of students admitted to the classes was twelve hundred and forty-four.

The scheme was revived in counties Longford and Westmeath after having been a year in abeyance, but was suspended during the period under review in counties Cavan and Fermanagh.

As compared with the figures for the previous year, the number of county committees of agriculture adopting the scheme was the same. There was an increase of five in the number of classes, but the total number of students admitted was one hundred and sixty-one less than in 1911-12. The average number per class was 15, as compared with 18 in the previous year. In regard to the number of classes formed it may be noted that arrangements had been completed for two additional classes in county Galway (see table following), but, owing to the illness of one of the itinerant instructors in agriculture for this county, it was not found possible to carry the projected arrangements into effect.

Thirty-eight county itinerant instructors in agriculture, and one teacher employed specially for the purpose conducted the classes.

The following table shows the progress of the scheme during the past five years:—

Year	Number of counties adopting the scheme	Number of classes established	Number of students admitted
1908-9, . . .	20	50	875
1909-10, . . .	26	70	1,166
1910-11, . . .	27	78	1,339
1911-12, . . .	23	76	1,405
1912-13, . . .	28	81	1,244

Details as to the classes held during the 1912-13 session are appended.

COUNTY AND CLASS CENTRE.	Duration of Course in Weeks.	Number of Students admitted.	Subjects other than Agriculture in which instruction was given.
Antrim—			
Armagh	17	13	Veterinary Hygiene, Horticulture, and Poultry-keeping.
Broughshane	*18	18	
Armagh—			
Balteagh	17	16	Veterinary Hygiene and Horticulture.
Bessbrook	17	12	
Crossmaglen	17	15	
Carlow—			
Hacketstown	19	14	—
Tinryland	19	13	
Clare—			
Feakle	17	23	Veterinary Hygiene and Horticulture.
Miltown-Malbay	17	14	
Crusheen	16	19	
Kilnihil	17	18	
Cork—			
Ballinroilig	† 9	7	—
Belgooly	19	27	Veterinary Hygiene.
Caheragh	17	18	Veterinary Hygiene.
Castlehaven	17	19	Horticulture.
Coshford	18	25	Veterinary Hygiene.
Castletownroche	17	14	—
Newmarket	18	20	Veterinary Hygiene.
Rathcoole	18	20	Veterinary Hygiene and Horticulture.
Watergrasshill	17	16	Veterinary Hygiene.
Whitechurch	18	20	Veterinary Hygiene.
Donegal—			
Carradonagh	18	28	Veterinary Hygiene and Horticulture.
Milford	18	28	
Down—			
Downpatrick	17	16	Veterinary Hygiene and Horticulture.
Kircubbin	17	18	
Dublin—			
Rathcoole	* 9	9	Horticulture.
Balbriggan	* 9	15	

* Class started later than class at Armoy.

† Class discontinued owing to unsatisfactory attendance.

COUNTY AND CLASS CENTRES.	Duration of Course in Weeks.	Number of Students admitted.	Subjects other than Agriculture in which instruction was given.
Galway—			
Attymon . . .	18	11	—
Tinquin . . .	17	9	
Kerry—			
Duagh . . .	18	12	Horticulture.
Brosna . . .	18	24	
Bathmore . . .	17	19	
Kilcummin . . .	† 9	9	
Ballyduff . . .	17	7	
Kildare—			
Castledermot . . .	16	13	Horticulture.
Robertstown . . .	16	10	
Kilkenny—			
Tullaroan . . .	18	16	Horticulture.
Gowran . . .	18	13	
Knocktopher . . .	17	10	
Comshy . . .	17	26	
Slieverua . . .	17	11	
King's—			
Tullamore . . .	20	10	—
Mount Bolus . . .	† 11	11	
Leitrim—			
Drumahair . . .	17	14	—
Glencar . . .	17	18	
Limerick—			
Askeaton . . .	† 10	12	Horticulture.
Devon Road . . .	17	24	
Effin . . .	18	16	
Galbally . . .	† 6	7	
Londonderry—			
Draperstown . . .	18	19	Veterinary Hygiene and Horticulture.
Eglinton . . .	17	19	
Longford—			
Abbeylara . . .	17	9	Horticulture.
Carriglass . . .	18	12	
Louth—			
Omesth . . .	15	11	Horticulture.
Drogheda . . .	16	9	

* Class discontinued owing to resignation of teacher.

† Class discontinued owing to unsatisfactory attendance.

COUNTY AND CLASS CENTERS	Duration of Course in Weeks.	Number of Students admitted.	Subjects other than Agriculture in which instruction was given.
Mayo—			
Belcastra . . .	19	13	—
Ballycastle . . .	19	13	Horticulture.
Kilmsine . . .	19	13	—
Knockmore . . .	19	17	Horticulture.
Queen's—			
Clough . . .	† 8	22	—
Aeragar . . .	† 8	15	
Rosecommon—			
Kilmore . . .	16	15	Horticulture.
Ballaghaderreen . . .	17	16	
Kilteevan . . .	17	12	
Toughmeconell . . .	* 16	16	
Sligo—			
Calry . . .	* 7	7	—
Managherow . . .	* 8	8	
Tipperary, N.R.—			
Castleiny . . .	18	22	Horticulture.
Moyearkey . . .	18	17	
Tipperary, S.R.—			
Tipperary . . .	21	18	Veterinary Hygiene and Horticulture.
Cashel . . .	21	22	
Tyrone—			
Carriemore . . .	17	13	Veterinary Hygiene and Horticulture.
Dromore . . .	17	14	
Ballygawley . . .	17	16	
Coalisland . . .	17	28	
Douglas Bridge . . .	17	11	
Waterford—			
Seart . . .	16	10	Horticulture.
Adamstown . . .	16	12	
Westmeath—			
Streamstown . . .	17	13	Horticulture.
Cloghan . . .	* 4	11	
Wexford—			
Ennisecorthy . . .	21	15	Veterinary Hygiene.

Total, 81 Classes ; 1,344 Students.

† Class discontinued owing to illness of teacher.

* Class discontinued owing to unsatisfactory attendance.

Instruction in veterinary hygiene was given at thirty classes, and in horticulture at fifty-eight classes.

The classes were, as in previous years, eligible under the Department's Programme for Technical Schools and Science and Art Schools and Classes, for grants at the rate of 4*d.* per attendance hour per student.

There was a large increase in the number of county committees of agriculture offering scholarships tenable at the Department's agricultural stations for competition among the students of the classes. The following table shows the counties in which these scholarships were offered, and the number awarded in each case by the committees as the result of examinations conducted by the Department:—

County.	Number of scholarships awarded.
Cork	4
Kerry	2
Kildare	2
Kilkenny	3
King's	2
Limerick	3
* Queen's	—
Tipperary, N.R.	2
Tipperary, S.R.	3
Waterford	1
Wexford	3
Total	25

* Two scholarships provided but not awarded owing to discontinuance of classes.

Students of these classes who desire to continue their training at one of the Department's agricultural stations or at such schools as the Antrim Agricultural School or the North-West Agricultural School will receive preference over other applicants for admission. Further, with regard to the Department's agricultural stations students whose attendance and progress at these classes have been satisfactory will be exempted from the usual entrance examination.

At the recent examination for scholarships tenable at the Royal College of Science for the year 1913-14, eight out of the thirteen successful competitors had been students of classes under this scheme.

Courses of instruction for girls were continued during the year at eleven agricultural schools. Two of these, viz., the Munster Institute and the Ulster Dairy School, are central institutions managed by the Department and open to resident pupils only. At the other nine centres local schools are working under private management, subject to the Department's supervision. Seven

AGRICULTURAL
SCHOOLS
FOR GIRLS.

of the local schools are open to both day and resident pupils. The total number of places provided for resident pupils is two hundred and forty-three. Two schools receive day pupils only. The school year is divided into four terms at the Munster Institute and the Ulster Dairy School, and into two terms at the local schools. The fee per term in both cases is £3 3s. or £3.

The object of the schools is mainly to provide training for girls of the farming class in the work of their own homes, and to counteract the tendency to abandon rural life. In addition the Munster Institute and the Ulster Dairy School provide courses to enable suitable pupils to qualify as (a) dairymaids in creameries or large dairies, (b) county instructors in dairying and poultry-keeping, and (c) teachers in agricultural schools for girls.

The schools do not aim at the preparation of girls for domestic service, but employment of this nature is frequently secured on advantageous terms by girls who have taken out the courses of training.

The principal subjects taught are: dairying, poultry-keeping, cottage gardening, household management, cookery, sewing and laundrywork.

Instruction in butter-making and poultry-keeping is also provided in addition to the ordinary course in domestic work at two residential schools of domestic training, viz., Dunmanway, county Cork, and Dundrum, county Tipperary. These schools are recognised for the award of scholarships by county committees of technical instruction, and, in the case of Dundrum, by the agricultural committees of county Tipperary.

At all schools the qualifications of the teachers must be approved by the Department.

The four terms held at the institute during the year were attended by two hundred and twenty pupils (including re-admissions). Over two hundred applicants were awaiting their turn for admission at the end of the year.

MUNSTER
INSTITUTE,
CORK.

Advanced courses for the training of county instructors in butter-making and poultry-keeping and of teachers for girls' agricultural schools were continued. The full course for instructorships or teacher-ships occupies six or seven terms. Pupils who qualify for this advanced training are required to pay a special fee of £6 6s. for the fourth and each subsequent term.

During the year under review seven students passed their final examinations for instructorships or teacherships including three teachers who took out supplementary courses for county instructorships. All obtained employment in connection with the Department's programme. The total number of students so employed now amounts to fifty-seven, viz., twenty county instructors in butter-making and poultry-keeping, six county

instructors in butter-making, eight county instructors in poultry-keeping, and twenty-three teachers in agricultural schools.

Ten dairymaid students who completed the third-term course passed as suitable for admission to a further course of training in a creamery with a view to acquiring a thorough acquaintance, under actual commercial conditions, with the work of a creamery dairymaid.

The first Irish egg-laying competition was held at the institute from October, 1912, to August, 1913. Fifty-two pens, each containing six birds, were included in the competition. A report on the results was published in the Department's *JOURNAL* for October, 1913. A similar competition will be held during the year 1913-14. Experiments in the breeding and feeding of poultry are also carried out at the institute.

At the London Dairy Show, October, 1912, three pupils of the Munster Institute took part in the butter-making competitions and were awarded by the judges two firsts, a second and a third prize and other distinctions, a fact which testifies to the efficiency of the teaching of this subject at the institute.

A short special course for instructors in poultry-keeping was held at the institute in June, 1913, during an interval between terms. The course dealt mainly with poultry diseases (including post-mortem examination of specimens); food-stuffs and feeding; the latest developments and methods in the poultry-keeping industry, etc. The instructors were also afforded an opportunity for discussing among themselves features of interest or difficulty connected with their work in their respective counties.

This school was started six years ago, in order to afford additional facilities for the class of teaching provided at the Munster Institute. The school is fully equal to the Munster Institute in regard to the standard of instruction, premises, equipment, etc. Finishing courses for instructorships, teacherships, etc., have not hitherto

been provided at the school, pupils who qualified for such courses being sent to the Munster Institute to complete their training. It is proposed, however, that in future pupils specialising with a view to becoming teachers may if it is considered desirable complete their course at this school.

The four terms held at the school during the year were attended by one hundred and ninety-two students (including re-admissions). Applications for admission were received from one hundred and forty-eight girls. Eight students who qualified for advanced training as instructors or teachers were transferred, for the fifth and subsequent terms, to the Munster Institute. One student was offered facilities for further training in a creamery with a view to qualifying as a creamery dairymaid.

Of the nine rural domestic economy schools which are conducted in accordance with programmes approved by the Department, six receive both day and resident pupils, two receive day pupils only, and one resident pupils alone. The demand for places for resident students is well maintained, but in many cases it has been found difficult to secure a regular attendance of an adequate number of day pupils—this difficulty is most apparent at those seasons of the year when there is pressing need for help on the holdings of the pupils' parents.

The number of day and of resident pupils admitted to each of these schools during the past year is as follows:—

School	Day Pupils	Resident Pupils including re-admissions	Total
Westport, co. Mayo	69	37	97
Claremorris "	29	29	58
Swinford "	72	30	102
Portumna, co. Galway	49	50	99
Clifden, "	39	39	69
Killeshandra, co. Cavan	11	12	23
Ramegrange, co. Wexford	—	80*	80
Loughglynn, co. Roscommon	40	—	40
Benado, co. Sligo	101	—	101
Total, year 1912-13	401	268	669
1911-12 (9 schools)	450	200	710
1910-11 (9 schools)	411	245	656
1909-10 (9 schools)	438	215	653
1908-9 (9 schools)	474	185	659
1907-8 (8 schools)	306	161	466
1906-7 (5 schools)	248	135	383
1905-6 (3 schools)	228	49	268

* At Ramegrange School the Department provided 30 places at a fee of £3 each for resident pupils at each half-yearly session. In addition 10 resident pupils, for whom no grants were made by the Department, were admitted to each session by the Managers at a fee of £10 each.

The Department's scheme of instruction in agriculture (see page [74] of the Appendices) was again put into operation by every county committee of agriculture during the year 1912-13. Forty-five instructors were appointed under the scheme, but of these, two worked during portion of the year only. Five instructors were appointed in county Cork, two instructors in each of the counties Clare, Galway, Kerry, Kilkenny, Limerick, Mayo, Roscommon and Tyrone, and one instructor in each of the remaining twenty-four counties.

In addition to the above-mentioned instructors two tillage demonstrators were employed in county Limerick who assisted the itinerant instructors in agriculture by giving demonstrations in ploughing, etc. These demonstrators paid 996 visits to farms during the year. An agricultural overseer was also appointed in county Meath to instruct the owners of new holdings formed in that county as a result of the operations of the Estates Commissioners. The overseer paid about 1,000 visits to farms and laid down 101 plots to demonstrate methods of seeding, cultivation, etc., in regard to the different farm crops.

The number of instructors employed directly under the scheme in each of the past five years is given in the following table:—

Year.	Number of instructors employed.				
1908-9	36				
1909-10	36				
1910-11	40				
1911-12	43				
1912-13	45				

Thirty-eight of the instructors were employed from November to March in the teaching of winter agricultural classes (dealt with specially on page 29 of this Report). During the months in question the instructors also delivered 627 evening lectures in agricultural subjects to farmers at 374 centres, the estimated total attendance thereat being 25,180, giving an average of 45 per lecture. The decline which has taken place each year since 1907-8 in the number of lectures given is an indication of the substitution for lectures of winter classes, at which longer and more systematised courses of instruction are followed and agricultural problems more thoroughly dealt with.

In addition to their ordinary work during the summer months the instructors carried out the work of judging under the Department's scheme of prizes for cottages and small farms. Instructors are not permitted to judge in districts where they are employed on their ordinary duties during the remainder of the year. This work which occupies from about two to six weeks, affords the instructors an opportunity of increasing their knowledge of agricultural methods practised in districts other than their own.

The agricultural instructors also perform very important duties under the Fertilisers and Feeding Stuffs Act and the Weeds and Agricultural Seeds Act in connection with which they are appointed official samplers. They are also required to report on applications for the consent of the Department

under Section 82 of the Irish Land Act, 1909, to the felling of trees on holdings affected by that Act.

The number of visits paid to farms by instructors during the year under review was 17,065, an average of about 379 for each instructor.

Seven hundred and sixty field experiments and 2,003 demonstration plots were laid down by the instructors; 61 experiments in the feeding of live stock were also conducted by them. Particulars of the field experiment and demonstration work as well as of the live stock experiments carried out by the instructors, will be found on pages 68 and 82, respectively, of this Report.

The Department again arranged for the benefit of the instructors a short course by specialists consisting of six lectures on recent agricultural research work. The lectures were given at the Royal College of Science, Dublin, on the 3rd and 4th June, 1918, and were attended by all the instructors. A lecture by the newly-appointed Professor of Forestry at the Royal College of Science on "Trees Considered from the Farmers' Point of View," was included in the course.

The annual conference of the instructors and the Department's officers took place on the 5th and 6th June. Matters affecting agricultural work throughout the country were discussed and suggestions for future work considered.

The Department again arranged for an educational tour extending over a fortnight of ten of the agricultural instructors to farms and agricultural institutions in the south and east of England during the end of June and beginning of July, 1913. The party was conducted by the Professor of Agriculture at the Royal College of Science, Dublin, and was confined to instructors who had not participated in similar tours organised in 1911 and 1912.

During the year 1912-13, four agricultural overseers, aided by forty-nine assistants, were employed on the work connected with the Department's special schemes of agricultural instruction in the congested districts. The ordinary schemes administered by county committees of agriculture were also in operation in counties containing congested districts.

In addition to the permanent assistant overseers, a number of temporary assistants were employed during the summer, to give instruction and demonstrations in the spraying of potatoes.

The following table shows the numbers of overseers, assistant

overseers, and temporary spraying demonstrators, employed each year since 1906-7, inclusive :—

Year	No. of Agricultural Overseers	No. of Assistant Agricultural Overseers	No. of temporary Spraying Demonstrators
1906-7	4	19	12
1907-8	4	23	11
1908-9	4	†*27	9
1909-10	4	*39	16
1910-11	4	*40	18
1911-12	4	*49	12
1912-13	4	49	12

* One of these assistants acted as overseer for Co. Leitrim.

† Including one agricultural demonstrator in Co. Roscommon.

The forty-nine assistant overseers employed during 1912-13 were located at the centres named in the following table, and worked over specified districts, covered by a radius, on an average of from ten to fifteen miles from the various headquarters. The areas of the districts assigned to the different assistant overseers, however, varied, of necessity, to a considerable extent, according to density of population, nature of land, etc.

District and Headquarters of Agricultural Overseers	Headquarters of Assistant Overseers.
Co. DONEGAL— Stranorlar (6 Assistants)	Carndonagh Currick Creeslough Donegal Glenties Stranorlar
COUNTIES MAYO, SLEIGO AND ROSCOMMON (WEST) Westport (15 Assistants)	Achill Sound Balla Ballyhaunis Belmullet Clare Island Clogher, Westport Glenties, Killybegs Killybegs, Hollymount Leahardane, Crossmolina Swinford Tournakeready Westport Leragh, Ballymote Tubbercurry Ballaghaderreen

District and Headquarters of Agricultural Overseers	Headquarters of Assistant Overseers
COUNTIES GALWAY, LEITRIM, ROSCOMMON (EAST) Athenry (30 Assistants)	Castlerea Ballinasmore Dromashambo Manorhamilton Clifden Do. (Investigation Station) Glenties Glynak, Ballymore Headford Inverin, Galway Kilkeerin, Carna Killimor, Ballinasloe Labane, Ardara Letterfrack Menlough, Ballinasloe Oughterard Killybeg Kilkee Lisdoonvarna Tomgraney
COUNTIES KERRY AND W. COKE Tralee (8 Assistants)	Brosna Caherciveen Dingle Kenmare Kilborglin Castletownbere Glengarriff Schull

The Department, as in the past few years, arranged for the establishment of numerous demonstration plots from which tenant purchasers in the congested counties might be made to realise the benefits to be gained from the cultivation of new varieties or the use of fresh seed and certain fertilisers. In all such cases the necessary plot of land is provided by the occupier free of charge, the Department in return supplying the requisite seeds and manures at about half price in consideration of the owner of the plot agreeing to carry out the instructions of the agricultural overseer as to cultivation, etc.

The following table gives particulars of the plots established during the past year:—

Description of Plot	Quantity of seed, etc., supplied for each Plot	No. of Plots laid down
Potatoes . . .	1 cwt.	2,609
Oats . . .	"	1,665
Barley . . .	"	136
Wheat . . .	"	234
Garden seeds . . .	Packet containing 10 or 11 varieties	1,944
Turnips and Mangels . . .	1 lb.	979
Grasses . . .	12 lbs.	1,530
Artificial Manures . . .	1 cwt.	2,075
Lime . . .	10 cwts.	20
Basic Slag . . .	2-2½ cwts.	619
Sprouted Potatoes . . .	6-12 Sprouting boxes	1,099
Catch Crops . . .	Various quantities of seeds and manures	281
TOTAL		12,391

The above plots were distributed among the districts of the agricultural overseers as follows :—

District	No. of Plots
Co. Donegal	1,531
Co. Mayo District	3,757
Co. Galway	4,789
Co. Kerry and W. Cork	2,314
Total	12,391

The following table shows the number of plots established each year since 1906-7, inclusive :—

Year	No. of Plots
1906-7,	8,834
1907-8,	8,288
1908-9,	8,843
1909-10,	9,579
1910-11,	10,536
1911-12,	12,140
1912-13,	12,391

These figures do not include the experimental plots established by agricultural overseers in connection with special tests, such as potato and turnip variety tests, spraying experiments, etc., of which a number were carried out during the year.

The four overseers, aided by their forty-nine assistants and twelve others employed temporarily for that special purpose, were occupied during the summer months POTATO SPRAYING mainly in giving instruction and demon- IN CONGESTED strations in spraying and in selling hand- DISTRICTS. spraying materials. The sales of these machines were effected in districts the small holders of which could not otherwise have procured such machines at a reasonable price. A large number of defective machines were repaired by these officers who supplied the requisite parts at cost price.

The numbers of spraying machines sold and repaired by overseers and temporary demonstrators throughout the congested districts during 1913 was as follows:—

District	Spraying Machines Sold	Spraying Machines Repaired
Co. Donegal	156	600
County Mayo district	630	656
County Galway district	869	947
Counties Kerry and W. Cork	143	134
TOTALS	1,797	2,337

The efforts which had been made by overseers and their assistants in previous years to induce local shopkeepers to stock spraying materials, proved so successful, that in 1913 the Department found it unnecessary to supply such materials in any part of the congested districts. A similar policy was pursued during 1913 with regard to sprayer repair parts, with the result that overseers were able to obtain locally all their requirements in this connection.

The extent of the Department's operations in congested districts in connection with potato spraying each year since 1907, inclusive, is shown in the following table:—

Year	Spraying Machines		Spraying Materials sold	
	Numbers sold	Numbers repaired	Sulphate of Copper	Washing Soda
1907	1,259	1,382	T. O. Q.	T. O. Q.
1908	1,364	1,001	61 11 1	27 1 0
1909	1,211	996	75 6 2	36 13 1
			1 17 1	1 7 3
1910	2,112	1,701	During the years 1910-13, inclusive, the supply of spraying materials in congested districts by the Department was discontinued, save in very exceptional circumstances.	
1911	1,567	1,893		
1912	1,607	2,286		
1913	1,797	2,337		

The assistant overseers also carried out a series of experiments during the year, with a view to ascertaining the most efficient method of spraying potatoes, and the best form in which spraying materials should be applied.

The introduction in July, 1912, of the Department's scheme No. 18 (see page 104 of the Appendices), under which loans are granted for the purchase of implements costing £6 and over, considerably reduced the scope of the special scheme for the distribution for demonstration purposes, of agricultural implements at three-fourths of cost price, to holders of farms in newly-settled estates in congested districts. With three exceptions, none but implements costing less than £6 were distributed in this manner during 1912-13.

The following table shows the numbers and value of implements distributed as educational objects at three-fourths cost price under this special scheme each year since 1910-11, inclusive, in which year the scheme was first put into operation :

Implements introduced	1910-11	1911-12	1912-13
Ploughs	83	144	206
Harrows	6	20	38
Drill Cultivators	39	34	73
Mowing Machines	60	72	1
Threshing "	—	2	—
Other implements	2	5	22
Various attachments	62	66	7
TOTALS	252	345	347
	£ s. d.	£ s. d.	£ s. d.
Value of implements (cost price)	992 15 8	1,456 18 6	943 17 9

The assistant overseers during the past year continued to sell at the reduced price of five shillings each, syringes for the treatment of contagious abortion in cattle. These syringes were sold only to holders of premium bulls, or of bulls located on special terms by the Department.

The total number of syringes thus sold up to the 30th September, 1913, was 197.

At the close of 1911 the Department introduced a scheme for the planting of trees on settled estates in certain portions of the congested districts. Under this scheme a quantity of trees and shrubs, mainly of forest and ornamental species, was sold to holders on such estates at one-third of the cost price, on condition that they made arrangements for the satisfactory fencing of the ground planted.

TREE
PLANTING IN
CONGESTED
DISTRICTS.

The principal varieties of trees and shrubs planted during the latter year were as follows :—

Variety of Tree	Quantity
Austrian Pine	14,000
Scotch Fir	13,000
Alder	5,000
Silver Fir	4,000
Larch	4,000
Beech	3,000
White Thorn	17,000

The following table shows the extent of the Department's operations in this connection during the two years 1911-12 and 1912-13 :—

Year	Total No. of Trees and Shrubs Planted	Gross cost
		£ s. d.
1911-12	18,774	32 13 11
1912-13	65,711	148 5 8

This scheme (see page [111] of the Appendices) on the whole continues to work satisfactorily. Although there was, as compared with the preceding year, some slight falling off in the attendance at the dispensary centres on the days appointed as well as in the number of cases

in which the veterinary surgeon was called in to the farmer's residence to see the ailing animals, it may be said that the figures do not give an adequate idea of the extent to which the services of the veterinary surgeon were utilised. When the small farmers who are entitled to the benefits of the scheme meet the veterinary surgeon on the road, at shows or at fairs, &c., they frequently consult him as to minor ailments or ask questions with regard to the feeding and treatment of animals, &c. In many cases of this kind where a little advice only is required it often happens that the veterinary surgeon does not charge a fee and so keeps no record.

Since the date of the last Report some changes have been made in the districts covered by the scheme. Eight new centres have been included and four old centres discontinued, making a net increase of four in the number of dispensaries. During the year veterinary surgeons were employed on the scheme in the following districts, viz. Carney, county Sligo; and Claremorris, county Mayo; and the veterinary surgeons at Galway and Belmullet, county Mayo, resigned their positions, which so far have not yet been filled. There are now thirty veterinary surgeons working the scheme at 121 centres as under :—

County and Headquarters of Veterinary Surgeon.	Centres at which Dispensaries are held.
CLARE :	
Ennis,	Ennistymon, Seariff, Tubber, and Tulla.
Kilrush,	Kildysart, Kilnihil, Lohasheeda, and Lissycesey.
Do.	Carrigaholt, Deonbeg, Kilkee, and Miltown-Malbay.
CORK :	
Bantry,	Ahakista, Ballingarry, Drimoleague, Glengarriff, and Kealkil.
Castletownbere,	Adrigole, Allihies, Eyeries, and Loughagh.
Skibbereen,	Ballydeob, Leap, and Toormore.
DONEGAL :	
Bundoran,	Cliffony, Glenside, and Mountprospect.
Carndonagh,	Ballygorman, Clonmany, and Moville.
Dunlewey,	Carrick, Donegal, Glencolumbkille, and Killybegs.
Falcarragh,	Burtonport, Creeslough, Derrybeg, Dunfanaghy, Dungloe, Gweedore, and Meenaleck.
Milford,	Carrigart, Tanney, and Termon.
Genties,	Ballinamore and Glenties.
GALWAY :	
Clifden,	Carna, Costello, Leenane, Letterfrack, Maam Cross, Recess, and Roundstone.
KERRY :	
Cahiriveen,	Caherdaniel, Glenbeigh, Portmagee, Sneem, and Waterville.
Dingle,	Anniscull, Ballyferrier, Cloghane, and Castlegregory.
Killarney,	Kenmare, Killorglin, Loughbridge, and Rathmore.
Listowel,	Ballylongford, and Causeway.
Do.	Knockmashel and Liselton.
Trillick,	Ardfert and Castlemaine.
Do.	Castleisland and Killybegs.
LIMERICK :	
Drumshanbo,	Ballinamore, Ballyfarnon, Dowra, Drumkeeran, and Keshcarrigan.
Manorhamilton,	Drumahair, Glencar, Glenfarn, and Killyclogher.
Mohill,	Carrigallen, Cloons, Dromod, Drumsna, and Farnaught.
MAYO :	
Ballina,	Ballycastle, Crossmolina, Eskoy and Killala.
Castlebar,	Balla, Glenisland, and Ross.
Claremorris,	Ballinrobe, Ballyhaunis, Cloonfad, and Hollymount.
Swinford,	Aclare, Charlestown, Foxford, Kiltully, and Kiltinagh.
Westport,	Achill, Ballyvaughan, Drummin, Killawalla, Louisburgh, Malaranny, and Newport.
ROSCOMMON :	
Boyle,	Ballaghaderreen, Frenchpark, and Gorteen.
SLIGO :	
Sligo,	Carney.

The following table shows the extent, as recorded by the veterinary surgeons, to which the scheme operated in the various districts during the past year:—

County and Headquarters.	No. of Dispensaries.	No. of Cases treated at Dispensary.	No. of Visits paid to Farmers' Residences.
CLARE :			
Ennis,	4	230	26
Kilrush,	4	391	20
Do.	4	1,119	186
CORK :			
Bantry,	5	284	102
Castletownbere,	4	272	128
Skibbereen	3	163	75
DONEGAL :			
Bundoran,	3	138	40
Carndonagh,	3	65	87
Dunkineely,	4	130	136
Falcarragh,	7	151	190
Milford	3	293	101
Glenties,	2	71	13
GALWAY :			
Clifden,	7	130	133
KERRY :			
Caherciveen,	5	311	243
Dingle,	4	102	127
Killarney,	4	258	74
Listowel,	2	31	43
Do.	2	279	96
Tralee,	2	65	12
Do.	2	21	3
LIMERICK :			
Drumshanbo,	5	512	151
Manorhamilton,	4	167	122
Mohill,	5	117	34
MAYO :			
Ballina,	4	515	103
Belmullet*,	6	39	93
Castlebar,	3	110	277
Claremorris,	4	21	26
Swinford,	5	193	136
Westport,	7	165	101
ROSCOMMON :			
Roscommon,	3	291	9
SLIGO :			
Sligo,	1	10	—
Totals,	121	6,514	2,887

* Resigned 31st July, 1913.

The scheme for improving the breeds of poultry continues to be one of the most popular county schemes. During 1912-13 this scheme was in operation in every county, the number of instructors employed being thirty-six, of whom twenty-one acted as instructors in buttermaking also.

POULTRY
KEEPING.

The number of egg stations for the past year was 72 in excess of that for the previous season, and 205 over the number in operation in 1910-11. The number of turkey stations was 691—an increase of 80 and 102 as compared with 1911-12 and 1910-11 respectively.

While the provision of stations in every county for the distribution of settings of eggs of pure-bred fowl has the immediate practical result of effecting a noticeable improvement in the quality of the birds reared in the country, the Department look to the system of practical instruction through the medium of the scheme of tutorial classes as the best means of rendering this improvement permanent. The course of instruction given at these classes lasts for at least two weeks at any one centre, and it may extend to not more than four weeks; hence as the number of pupils receiving practical instruction at such courses must necessarily be limited, it will take some time before the results of such training becomes evident through a general improvement in the conditions under which poultry are bred, housed, and fed in this country.

The progress in the working of these schemes during the past five years is shown in the following tables:—

POULTRY STATIONS.

Year.	Counties.	Hens only.	Hens and Ducks.	Settings of eggs distributed.	Geese.	Settings of eggs distributed.	Turkeys.	Number of hens mated.
1908-9	31	328	261	63,471	130	1,917	497	14,641
1909-10	32	337	282	66,187	140	2,108	532	15,762
1910-11	32	310	274	65,700	184	2,801	589	18,269
1911-12	33	389	292	68,365	230	3,287	661	19,661
1912-13	33	397	306	78,426	270	3,942	691	20,514

NOTE.—A setting consists of 12 eggs except in the case of a goose station for which 3 eggs constitute a setting.

INSTRUCTION.

Year.	Counties.	Number of Instructors.	Number of Lecturers.	Number of visits.	Number of class centres.	Number of courses of instruction given thereat.	Number of daily classes in these courses.	Number of pupils on attendance register.
1908-9	31	28	677	9,159	98	98	1,402	1,420*
1909-10	32	23	588	10,198	140	140	1,522	1,650*
1910-11	32	35	531	14,225	142	142	1,552	1,900*
1911-12	33	36	253	15,905	124	124	1,600	1,400
1912-13	33	36	144	15,167	131	131	1,633	1,773

* Estimated.

The amounts paid by county committees as premiums to holders of stations under the poultry scheme for 1918 are as under :—

County.	Hen and Duck Stations.	Goose Stations.	Turkey Stations.
	£ s. d.	£ s. d.	£ s. d.
Antrim	100 0 0	—	48 0 0
Armagh,	100 0 0	12 0 0	58 0 0
Carlow,	39 17 5	4 0 0	12 0 0
Cavan,	145 0 0	24 0 0	72 0 0
Clare,	78 3 0	17 0 0	36 8 0
Cork	232 2 6	48 0 0	84 2 0
Donegal,	208 13 9	30 0 0	34 6 0
Down,	138 4 8	20 0 0	73 14 0
Dublin,	35 0 0	—	—
Fermanagh,	115 0 0	16 0 0	50 0 0
Galway,	112 15 8	25 10 0	60 0 0
Kerry,	170 0 2	28 6 8	43 18 0
Kildare,	75 0 0	8 0 0	28 8 0
Kilkenny,	90 0 0	8 0 0	46 0 0
King's,	75 0 0	8 16 8	27 18 0
Leitrim,	50 0 0	12 0 0	40 12 0
Limerick,	70 0 0	2 0 0	17 8 0
Londonderry,	102 10 11	16 0 0	48 0 0
Longford,	50 3 1	15 16 8	25 4 0
Louth,	96 3 9	12 0 0	48 0 0
Mayo,	173 10 0	26 3 4	28 8 0
Meath,	123 1 3	14 10 0	58 0 0
Monaghan,	125 0 0	10 0 0	50 0 0
Queen's,	55 0 0	—	8 0 0
Rosecommon,	51 6 4	30 0 0	56 0 0
Sligo,	98 12 6	18 0 0	26 0 0
Tipperary (N.R.,)	82 3 9	12 0 0	27 19 0
" (S.R.,)	77 12 6	20 3 4	30 0 0
Tyrone,	108 16 3	19 16 8	50 0 0
Waterford,	113 1 3	5 10 0	19 0 0
Westmeath,	116 8 9	33 16 8	74 0 0
Wexford,	104 13 1	10 0 0	45 12 0
Wicklow,	68 16 10	9 14 5	20 0 0

Copies of the poultry schemes will be found in the Appendices, pages [80] to [85].

A laying competition restricted to a limited number of pullets was conducted by the Department at the Munster Institute, Cork. For further information see page 76 of this Report.

In addition to the foregoing, the Department subsidised two special experiments which were carried out in county Tyrone under certain prescribed conditions. One experiment with newly hatched chicks was as follows: The station holder was required to sell to residents in the county a number of strong healthy chickens from one to five days old, which had been

hatched at the station from eggs of birds kept for premium purposes. Between the 31st December, 1912, and the 31st May, 1913, a total of 68 dozen chicks were thus disposed of to residents in the county at the fixed price of twopence per chick. A premium of £5 was paid to the station holder. In the second experiment the holder of a turkey station was granted a premium of £3 5s. for distributing 28 sittings of turkey eggs—each sitting consisting of six eggs laid by pure bred American Bronze birds. These experiments will be continued for another year.

Thirty-five instructors, of whom twenty-one gave instruction in poultry management also, were employed BUTTER-MAKING. by twenty-six county committees during 1912-13. Instructors were not available for appointment in the counties of Leitrim, Longford and Sligo. The committees for the following counties did not allocate funds for the purposes of this scheme, viz.:—Armagh, Dublin, Fermanagh, and Limerick.

During the year the instructors delivered 131 lectures, the attendance at which averaged 18 per lecture. Courses of instruction extending over two weeks were given at 213 centres; the average daily attendance at the classes was eight pupils.

A copy of the scheme will be found in the Appendices, page [89].

Particulars of the working of this scheme during each of the past five years are subjoined:—

Year.	Counties.	Number of Instructors.	No. of Lectures.	No. of visits to private dairies.	No. of class centres.	No. of courses of instruction thereat.	No. of daily classes in these courses.	No. of pupils on attendance register
1908-9	26	30	245	5918	227	227	3595	1860*
1909-10	26	33	128	7703	305	305	4093	2550*
1910-11	27	33	102	6510	260	260	3282	2150*
1911-12	26	33	101	7410	224	224	3182	1890
1912-13	26	35	131	6286	213	213	2715	1863

* Estimated.

In all forty instructors were employed in the thirty-three counties; of these thirty-six were qualified to give instruction in both horticulture and bee-keeping, one in horticulture alone, and three in bee-keeping alone. Two county committees each employed separate instructors for horticulture

and for bee-keeping, while in one county a bee-keeping instructor alone was appointed.

Some of the instructors delivered lectures during the past season; the number of such lectures was 190 with an average attendance of 40 persons. The main work of the instructors, however, continues to consist of visiting and giving demonstrations at gardens, orchards, and cottage plots, &c. The total number of such visits, &c., was 34,815. Three hundred and seventy-two demonstration plots were laid down as compared with three hundred and fifty-four in 1911-12. The owners or occupiers of the holdings, on which the plots were established, as a rule took a keen interest in and paid attention to these plots. In many parts of the country, with a few exceptions, the cultivation of the plots attached to labourers' cottages leaves much to be desired. One of the most useful means, however, for remedying this defect is available in the person of the horticultural instructor, and the Department consider that county committees would be well advised to concentrate the attention of these instructors on labourers' plots for some years.

The Department carried out the usual inspection of the principal Irish nurseries with a view to advising county committees of those nurseries at which suitable trees might be procured for residents in the several counties who might wish to take advantage of any arrangement made by the committees with one or more of such nurseries for the supply of trees of different varieties at a stated price. In the planting of trees so procured the horticultural instructors gave advice and instruction to the purchasers.

The following figures indicate the number of trees planted during each of the past six years under the above-mentioned arrangement:—

	1908	1909	1910	1911	1912	1913
Apples, . . .	29,652	25,804	29,731	30,392	75,909	61,480
Pears, . . .	1,773	1,342	1,321	934	1,377	2,228
Plums, . . .	2,221	1,566	1,706	1,159	2,508	4,374
Damaons, . . .	62	88	294	17	62	546
Cherries . . .	204	225	86	59	144	62
Gooseberries, . .	13,261	8,405	8,282	7,261	7,406	16,411
Current, . . .	7,529	7,065	5,843	5,947	11,157	19,398
Raspberries, . .	7,151	6,474	3,219	6,102	3,308	6,390
Other Fruits, . .	13,315	7,464	2,344	3,407	2,551	1,468
Forest and other Trees and Shrubs	426,733	623,608	424,601	580,891	410,741	334,299

For copy of the scheme see page [92] of the Appendices.

Returns have been received in respect of 38 counties showing that altogether 325 cases of foul brood came under the notice of the local authorities and received attention.

BEE PEST
PREVENTION
(IRELAND) ACT,
1908.

The following statement shows the amounts set aside by twenty-six committees of agriculture, with the consent of their respective county councils, for the payment of compensation to beekeepers in respect of bees, &c., compulsorily destroyed under the provisions of the Act :—

County Committee.	Amount allocated for compensation.
ULSTER :—	£
Antrim,	15
Armagh,	5
Cavan,	15
Donegal,	10
Down,	20
Fermanagh,	5
Londonderry,	5
Monaghan,	10
Tyrone,	10
MUNSTER :—	
Cork,	20
Kerry,	5
Limerick,	10
Tipperary, S.R.,	10
LEINSTER :—	
Kildare,	10
Kilkenny,	20
King's,	10
Longford,	1
Louth,	10
Meath,	20
Queen's,	5
Westmeath,	5
Wexford,	20
CONNACHT :—	
Galway,	10
Leitrim,	5
Mayo,	6
Sligo,	3
TOTAL.	£265

Payments of compensation amounting to £33 2s. 6d. were recommended by the local authorities in fourteen of the above-mentioned counties.

The Department were consulted by one of the county committees of agriculture with regard to the procedure to be adopted in a case in which a beekeeper in the county refused to allow the county instructor in beekeeping to inspect his apiary for foul brood. The Department advised the committee as to the lines on which action might be taken, and legal proceedings were subsequently instituted by the county council against the beekeeper, with the result that he was fined 20s. and 23s. extra costs.

Isle of Wight Disease in Bees.—Instructions were issued early this year to county instructors in beekeeping to report at once to the Department any suspected cases of Isle of Wight Disease which might come under their notice, and the Department's expert in beekeeping also kept a careful watch in the course of his inspections of apiaries for any signs of the disease. As a result thirty-nine suspected cases were reported during the past season. In every case the beekeeper was advised as to suitable precautionary measures to be taken. In addition, where it was possible an examination of bees from the infected apiary was carried out by the Department, and if this examination disclosed the existence of *noosema apis* the beekeeper was at once informed and instructed as to the treatment of the disease.

The Department have at present no statutory power to enforce compliance with any measures for the treatment of this disease, but the beekeepers, concerned willingly complied in many cases with the measures prescribed.

Particulars of this scheme will be found in the Appendixes, page [71].

PRIZES FOR COTTAGES AND SMALL FARMS.	The committees for the counties of Armagh, Carlow, and Dublin did not adopt the scheme for 1913, but it was in operation in the thirty remaining counties.
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While it is pleasing to note that the entries from labourers in the cottage section have increased, the Department consider that the number of cottages entered for competition is far below what it should be when the large number of Rural District cottages throughout the country is taken into account.

The itinerant instructors in agriculture acted as judges for the scheme in counties other than those in which they were employed.

From the reports of the judges the Department were glad to learn that a steady improvement in the condition and care of the holdings generally inspected was observed and that the live stock and poultry were well cared.

Table showing for each of the past five years the number of counties in which this scheme was in operation, the number of

holdings entered for competition and the number and total value of prizes awarded :—

Year.	No. of Counties.	No. of Entries.	No. of Prizes Awarded.	Amount expended in Prizes.
1909, . . .	28	4,004	2,507	£ 4,796
1910, . . .	28	4,069	2,486	4,632
1911, . . .	30	4,600	2,758	5,048
1912, . . .	30	4,585	3,056	5,490
1913, . . .	30	4,483	2,999	5,781

The Meath county committee continued in 1913 their scheme of prizes for tillage, the competition being confined to persons who derive their means of living from farming and who reside upon and work their farms themselves. In each of the three districts into which the county was divided for the purposes of this competition three prizes were awarded of the value of £30, £20, and £15 respectively. The number of competitors during each of the six years that the scheme has been in operation were as follows :—

1908 . . .	32	1911 . . .	20
1909 . . .	28	1912 . . .	19
1910 . . .	21	1913 . . .	17

As the scheme so far does not appear to have fulfilled its object, viz., to encourage the extension of tillage and improvement in the methods of cultivation, the county committee are at present considering a revision of the scheme with a view to inducing a larger number of competitors to enter.

IMPROVEMENT OF LIVE STOCK.

The general horse-breeding scheme for 1913, particulars of which will be found in the Appendices, page [53] was adopted in every county save Meath. The council for that county submitted a request to the Department to have Clydesdale stallions registered for county Meath. This request was considered carefully on several occasions by the Department in consultation with the Agricultural Board, by the Council of Agriculture, and by the Department's advisory committee on horse breeding, and as these bodies did not approve of the proposal the Department notified the county council that they could not see their way to register this breed of sire for the county. In consequence of this decision the Meath county council declined to allow the horse-breeding scheme to be put into operation in the county.

The following table shows the number of stallions accepted for entry in the Department's register for each of the past five years:—

Year.	Thorough-bred.	Irish Draught.	Half-bred.	Clydesdale.	Shire.	Total.
1909, . . .	153	—	61	57	25	296
1910, . . .	167	—	83	63	27	340
1911, . . .	184	13	87	65	23	370
1912, . . .	192	13	105	64	22	396
1913, . . .	181	12	106	75	19	393

Information as to the number of loans granted for the purchase of stallions during the past year will be found at page 96 of this Report.

The following tables show in respect of each of the past five years (1) the number of local exhibitions of mares held, (2) the number of mares passed thereat as sound and suitable for nominations, (3) the number of such mares, when awarded, nominated by county committees, served by the different classes of registered stallions, (4) the amount allocated by county committees for nominations, and (5) the amount actually expended:—

Year.	No. of Local Exhibitions of Mares held.	No. of Mares passed thereat as sound and suitable.	No. of Mares, awarded Nominations by county committees, sent for service by				Amount allocated for Nominations.	Amount expended for Nominations.
			Thorough-bred Stallions	Irish Draught and Halfbred Stallions	Shire Stallions.	Clydesdale Stallions.		
1909	223	3,568*	1,992	645	195	733	7,841	7,490
1910	219	3,465*	1,832	663	220	769	7,515	7,352
1911	229	3,305*	2,035	1,535	247	1,083	7,590	10,794
1912	233	5,761*	2,512	1,542	398	1,313	7,584	12,032
1913	229	5,624†	2,374	1,599	312	1,339	7,284	11,467‡

* Number actually paid for. † Estimated number to be paid for.

‡ Estimated amount to be paid, which includes a sum of £4,810 provided from the Development Grant.

Arrangements similar to those adopted in previous years were made in 1913 for the inspection and examination of mares competing for nominations.

The special regulations for 1913 made by county committees in respect of the valuation of farmers eligible to exhibit mares for nominations were as under:—

Province and County	Limits of Valuation.			
	Higher Valuation.		Lower Valuation.	
	Proportion of Nominations allocated.	Valuation. £.	Proportion of Nominations allocated.	Valuation. £.
ULSTER.				
Antrim,	$\frac{1}{2}$	No limit	—	75
Armagh,	No limit	—	—	—
Cavan,	Valuation not to exceed £50	—	—	—
Donegal,	$\frac{1}{2}$ under £10; $\frac{1}{2}$ between £10 and £30; $\frac{1}{2}$ between £30 and £150	—	—	—
Down,	$\frac{1}{2}$	75	$\frac{1}{2}$	40
Fermanagh,	$\frac{1}{2}$ under £50; $\frac{1}{2}$ between £50 and £100; and $\frac{1}{2}$ between £100 and £150	—	—	—
Londonderry,	$\frac{1}{2}$ under £20; $\frac{1}{2}$ between £20 and £40; $\frac{1}{2}$ £40 and over	—	—	—
Monaghan,	$\frac{1}{2}$	100	$\frac{1}{2}$	30
Tyrone,	$\frac{1}{2}$	150	$\frac{1}{2}$	60
MUNSTER.				
Clare,	$\frac{1}{2}$	200	$\frac{1}{2}$	50
Cork, W.R.,	$\frac{1}{2}$	150	$\frac{1}{2}$	30
„ E.R.,	$\frac{1}{2}$	200	$\frac{1}{2}$	50
Kerry,	Valuation not to exceed £100	—	—	—
Limerick,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	60
Tipperary, N.R.,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	50
„ S.R.,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	80
Waterford,	$\frac{1}{2}$	200	$\frac{1}{2}$	75
LEINSTER.				
Carlow,	$\frac{1}{2}$	150	$\frac{1}{2}$	50
Dublin,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	100
Kildare,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	100
Kilkenny,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	50
King's,	$\frac{1}{2}$	75	$\frac{1}{2}$	40
Longford,	$\frac{1}{2}$	300	$\frac{1}{2}$	50
Louth,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	50
Meath,	$\frac{1}{2}$	No scheme	$\frac{1}{2}$	50
Queen's,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	50
Westmeath,	$\frac{1}{2}$	160	$\frac{1}{2}$	60
Wexford,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	50
Wicklow,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	50
CONNACHT.				
Galway,	$\frac{1}{2}$	100	$\frac{1}{2}$	30
Leitrim,	$\frac{1}{2}$	No limit	$\frac{1}{2}$	20
Mayo,	$\frac{1}{2}$	30	$\frac{1}{2}$	18
Roscommon,	$\frac{1}{2}$	80	$\frac{1}{2}$	30
Sligo,	$\frac{1}{2}$	50	$\frac{1}{2}$	25

The following table shows the extent to which the scheme was availed of by farmers in each of the counties concerned:—

Province and County.	Number of Local Exhibitions arranged by County Committee.	Number of Mares competing for free nominations.	Number of Mares declared suitable by Judge and Veterinary Surgeon for free nominations.		
			Se-lected.	Re-served.	Total.
ULSTER.					
Antrim,	6	569	314	33	347
Armagh,	4	162	98	4	102
Cavan,	7	432	147	60	227
Donegal,	14	503	196	49	245
Down,	11	423	220	67	287
Fermanagh,	6	242	96	33	131
Londonderry,	4	297	147	29	176
Monaghan,	6	279	154	21	175
Tyrone,	6	244	164	3	167
Totals for Ulster,	64	3,141	1,558	319	1,877
MUNSTER.					
Clare,	6	765	327	78	405
Cork,	17	1,344	461	127	526
Kerry,	6	954	327	60	407
Limerick,	6	426	230	25	255
Tipperary, N.R.,	4	479	196	41	237
S.R.,	9	951	456	164	560
Waterford,	6	466	243	64	327
Totals for Munster,	60	5,335	2,160	539	2,719
LEINSTER.					
Carlow,	4	179	49	43	92
Dublin,	12	364	246	65	311
Kildare,	5	224	111	32	133
Kilkenny,	8	505	171	69	240
King's,	6	194	75	25	100
Longford,	3	247	100	30	136
Louth,	3	173	60	27	87
Meath,		No scheme			
Queen's,	5	432	130	63	193
Westmeath,	6	310	111	62	173
Wexford,	5	599	245	67	312
Wicklow,	7	447	154	62	216
Totals for Leinster,	66	3,694	1,452	535	1,967
CONNACHT.					
Galway,	11	316	204	46	250
L Leitrim,	7	235	98	37	135
Mayo,	8	506	154	60	234
Roscommon,	9	367	114	36	152
Sligo,	4	171	83	17	100
Totals for Connacht,	39	1,595	653	216	671
Totals for all Ireland,	229	13,765	5,643	1,611	7,434

There were 13,765 mares inspected, of which 8,251 were passed by the judges as eligible for nominations, but of these the veterinary surgeons rejected 797 as unsound.

Over 72 per cent. of the nominations awarded were given to mares six years of age and under.

In 1913 for the first time nine committees adopted the system of deferring payment of portion of the service fees until evidence of the production of a foal was forthcoming. The following table shows the amounts payable respectively on service and after the production of a foal in the several counties concerned :—

County.	Thoroughbred Sires.		Agricultural and Half-bred Sires.	
	Fee payable on Service.	Fee payable after Foaling.	Fee payable on Service.	Fee payable after Foaling.
Antrim, . . .	£ 1	£ 1½	£ 1	£ 1½
Armagh, . . .	1	2	1	2
Down, . . .	1	1½	1	1½
Fermanagh, . . .	1	1½	1	1½
Kildare, . . .	1	1	1	1
Londonderry, . . .	1	1½	1	1½
Monaghan, . . .	1	1½	1	1½
Tyrone, . . .	1½	2½	1	1½

In the case of the remaining twenty-three counties in which the scheme was in operation the value of the nomination fee as fixed by the county committee was £2, save in Dublin, where it was fixed at £3.

The experimental premium scheme which had been in operation in county Tyrone during the years 1910, 1911, and 1912 was discontinued during the past year. The following particulars show the result of the working of the scheme in 1912,—these figures were not available for publication in last Annual Report :—

Breed of Stallion.	No. of Stallions.	No. of Services.	Forks.				Amount paid in Fees.
			Mals.	Female.	No Foal.	No information.	
Thoroughbred, . . .	2	38	11	8	12	7	£ 47 10
Agricultural, . . .	7	325	64	52	62	147	210 0
Half-bred, . . .	3	60	16	15	21	8	40 0
Totals, . . .	12	423	91	75	95	162	297 10

The following table indicates the extent to which the Department made special provision in 1918 for the congested areas by placing stallions in remote districts at a nominal service fee :—

County.	Breed of Stallion.	Place of Location.
Donagall, . . .	Half-bred, . . .	Arranmore Island.
Kerry, . . .	*Welsh Cob, . . .	Snoem.
Do., . . .	* do., . . .	Dingle.
Leitrim, . . .	Pony, . . .	Mohill.
Mayo, . . .	Pony, . . .	Innisturk Island.
Do., . . .	Half-bred, . . .	Achill Sound.
Do., . . .	*Welsh Cob, . . .	Clare Island.
Do., . . .	Thoroughbred, . . .	Achill Sound.

* Formerly the property of the Congested Districts Board.

Development Grant.—The sum of £10,000 was again placed at the disposal of the Department for the following purposes :—

- (a) Purchase of Stallions.
- (b) Nominations of Mares.
- (c) Irish Draught Horse Scheme.

(a) Within the period under review the Department expended a sum of £3,798 10s. in the purchase of fifteen stallions, of which fourteen have been disposed of to farmers. Eight colts, viz., four thoroughbreds and four half-breds, were purchased at a cost of £1,051.

(b) Of the amount earmarked for the purpose of providing additional nominations under the general horse breeding scheme the Department distributed the sum of £4,810 between thirty-two county committees—no portion of this sum was expended in county Meath as the horse breeding scheme was not in operation in that county.

By means of the foregoing grant, in addition to the sum of £7,284 allocated from the joint fund, the county committees in question awarded a total of 5,843 nominations of the value of £2 each (in county Dublin the nomination fee was fixed by the county committee at £3). The aggregate expenditure amounted to £11,982.

(c) During the past season 211 out of the 266 mares originally registered for the purpose of the Irish Draught Horse scheme were served by twelve approved Irish draught stallions. One of these sires stood for service in each of the counties Carlow, Clare, Cork, Down, Kildare, Limerick, Monaghan, Queen's, Westmeath, and Wexford, whilst two were available for county Kilkenny.

As in previous years the Department defrayed the following expenses in respect of the service of each registered mare sent by their instructions to a registered Irish draught stallion, viz., service fee, carriage to and from the stallion, and cost of keep while at the stud. The total expenditure under this head was £1,875.

The following table will give an indication of the results of the working of this scheme since it was put into operation two years ago :—

Year.	Number of Stallions at service.	Number of Mares served.	Foals Born.		Percentage of Foals to Mares served.
			Male.	Female.	
1911.	13	243	*	*	*
1912.	13	220	82	72	63·3
1913.	12	211	76	80	71·0

* First year of scheme.

Thirty-five stallion asses were placed by the Department in the poorer localities in which donkeys are principally used. These animals were put in charge of caretakers, who were held responsible for the proper care and treatment of the animals while in their possession.

These asses were placed as follows :—

County.	District in which Located.	County.	District in which Located.
Clare.	Deonogon, Quin.	Kerry.	Ballyheigue.
Do.	Kilnaboy.	Do.	Tuam.
Cork.	Macroom.	Do.	Ballinaskelliga.
Do.	Skibbereen.	Do.	Ballylongford.
Donegal.	Bruckless.	Do.	Castlegregory.
Do.	Bundoran.	Leitrim.	Cloone.
Do.	Arrammore Island.	Do.	Mohill.
Down.	Strandtown.	Do.	Drumlish.
Fermanagh.	Deerlylin.	Mayo.	Kilkeally.
Galway.	Croughwell.	Do.	Westport.
Do.	Ballygar.	Do.	Ballina.
Do.	Tuas.	Do.	Kiltimagh.
Do.	Athlery.	Roscommon.	Donamon.
Do.	Curteen.	Do.	Ballaghaderreen.
Do.	Oughterard.	Do.	Kilroosky.
Kerry.	Lixnaw.	Do.	Ballydangan.
Do.	Valencia Island.	Do.	Ballinagone.

The continued popularity of this scheme is demonstrated by the fact that it was adopted by every county CATTLE-BREEDING committee for 1913. For copy of scheme see page [59] of the Appendices.

The general regulations as to the value of premiums were the same as in the previous year, viz., for Kerry, Dexter, Galloway and Registered Dairy bulls, £10; and for other approved breeds any sum not less than £10 and not more than £15 at the discretion of the county committee. Save in the case of three counties the maximum figure, £15, was adopted by county committees as the value of a premium for breeds other than the four above specified. The three exceptions were Antrim, where the sum of £12 was fixed; Longford, where the premium for a bull of the Hereford or of the Aberdeen Angus breed was fixed at £12 10s.; and Roscommon, where the premium was £12 for the two breeds.

Particulars as to the operation in 1913 of the scheme of loans for the purchase of bulls are given on page 95 of this Report.

The amounts allocated by county committees for premiums to bulls and the amounts actually expended during each of the past five years are as follows:—

Year.	Amount allocated.	Amount expended.
	£	£
1909,	13,287	11,967
1910,	13,302	12,221
1911,	13,535	12,690
1912,	13,787	12,943
1913,	14,030	13,032

The thirty-three county committees set aside funds for the award in the aggregate of 959 premiums for 1913.

At local exhibitions held at 440 centres 579 bulls which had held premiums in 1912 were passed as suitable for further premiums and of these 560 were awarded premiums for 1913 by the several county committees. This left 399 premiums available for new applicants, but only 340 were taken up provisionally. The total number of premiums therefore awarded was 900 or 94 per cent. of the total for which provision had been made.

In Ulster 98 per cent., in Leinster 96 per cent., in Connacht 91 per cent., and in Munster 87 per cent. of the total premiums offered were taken up.

Table showing the ages and breeds of bulls selected for awarded premiums under the scheme as administered by the county committees during each of the past five years:—

Year	Ages.				Breeds.				Total No. of Bulls awarded Premiums
	Yearlings	Two-year-olds	Three-year-olds	Four-year-olds	Short-horn	Aberdeen Angus	Hereford	Other Breeds	
1909,	295	247	200	70	579	134	78	21	812
1910,	324	285	184	65	578	159	75	26	838
1911,	309	306	202	49	580	178	75	33	866
1912,	302	291	221	80	583	197	69	45	894
1913,	328	275	216	81	592	185	67	58	900*

* Number of premiums provisionally awarded.

The following table shows by provinces and counties how the premiums were distributed among the breeds selected by the county committees to stand for premiums in 1913:—

County	Short-horn	Aberdeen Angus	Hereford	Galloway	Red Polled	Registered Dairy	Totals
ULSTER:							
Antrim,	44	2	—	3	—	8	57
Armagh,	28	2	—	—	—	1	31
Cavan,	19	5	5	—	—	—	29
Donegal,	22	11	—	4	—	—	37
Down,	53	12	—	—	—	2	67
Fermanagh,	15	11	—	—	—	—	26
Londonderry,	27	2	—	—	—	3	32
Monaghan,	18	—	—	—	—	3	21
Tyrone,	43	6	—	1	—	1	51
Totals for Ulster,	269	51	5	8	—	18	351
MUNSTER:							
Clare,	12	3	—	—	—	—	15
Cork,	53	11	—	—	—	—	64
Keery,	18	15	—	—	—	—	33
Limerick,	9	5	—	—	—	4	18
Tipperary (N.R.),	8	3	3	—	—	2	16
Tipperary (S.R.),	9	3	4	—	—	6	22
Waterford,	8	7	—	—	—	—	15
Totals for Munster,	117	47	7	—	—	12	183
LEINSTER:							
Carlow,	4	5	—	—	—	2	11
Dublin,	8	3	4	—	—	—	15
Dublin,	16	5	2	—	—	1	24
Kildare,	22	3	—	—	—	7	32
Kilkenny,	13	3	3	—	—	—	19
King's,	7	2	2	—	—	—	11
Longford,	10	2	3	—	—	1	16
Louth,	20	5	10	—	—	—	35
Meath,	14	2	—	—	—	1	17
Queen's,	4	4	17	—	—	1	27
Westmeath,	25	3	—	—	1	—	28
Wexford,	7	13	—	—	—	—	20
Wicklow,	—	—	—	—	—	—	—
Totals for Leinster,	150	50	41	—	1	13	255
CONNACHT:							
Galway,	23	4	4	1	—	—	32
Leltrim,	3	7	—	—	—	1	11
Mayo,	9	13	1	2	—	—	25
Roscommon,	13	4	6	—	—	—	23
Sligo,	8	9	3	—	—	—	20
Totals for Connacht,	56	37	14	3	—	1	111
Totals for Ireland,	592	185	67	11	1	44	900

The following table shows, by provinces and counties, the distribution of premium bulls in 1913:—

Province and County	Number of Premiums provided by County Committee for 1913.	Number of Bulls continued from 1912.	Number of Bulls provisionally awarded Premiums for first time in 1913.	Total Number of Bulls approved for Premiums in 1913.
ULSTER:				
Antrim,	63	28	29	57
Armagh,	32	8	23	31
Cavan,	29	16	13	29
Donegal,	37	30	7	37
Down,	68	42	25	67
Fermanagh,	26	15	11	26
Londonderry,	33	23	9	32
Monaghan,	21	12	9	21
Tyrone,	51	19	32	51
Totals for Ulster,	360	193	158	351
MUNSTER:				
Clare,	20	11	4	15
Cork,	65	42	22	64
Kerry,	33	23	10	33
Limerick,	35	8	10	18
Tipperary, N.R.,	17	7	9	16
Tipperary, S.R.,	22	16	8	22
Waterford,	18	10	5	15
Totals for Munster,	210	117	66	183
LEINSTER:				
Carlow,	11	8	3	11
Dublin,	15	10	5	15
Kildare,	25	17	7	24
Kilkenny,	33	24	8	32
King's,	19	15	4	19
Longford,	11	6	5	11
Louth,	16	13	3	16
Meath,	44	22	13	35
Queen's,	17	14	3	17
Westmeath,	23	19	8	27
Wexford,	28	20	8	28
Wicklow,	20	13	7	20
Totals for Leinster,	267	181	74	255
CONNACHT:				
Galway,	35	24	8	32
Leitrim,	15	8	5	11
Mayo,	28	13	12	25
Roscommon,	24	17	6	23
Sligo,	20	9	11	20
Totals for Connacht,	122	69	42	111
Totals for Ireland,	959	560	340	900

*Exclusive of 265 bulls under the congested districts schemes, see page 64.

The following is a summary of the regulations for 1913 made by each county committee in regard to qualifications of cow-owners and amount of service fee :—

Province and County.	Qualification of cow-owners as to valuation and service fee as fixed by County Committees.
ULSTER :	
Antrim,	£100. 1/- fee in all cases.
Armagh,	£20 for 1/- fee. Unlimited for 2/6 fee.
Cavan,	£50. 1/- fee in all cases.
Donegal,	£150. Three-fourths of the prescribed number of cows to belong to farmers under £20 valuation. 1/- fee in all cases.
Down,	£40 for 1/- fee. £75 for 2/6 fee.
Fermanagh,	£15 for 1/- fee. £100 for 2/6 fee.
Londonderry,	No limit. 1/- fee in all cases.
Monaghan,	£40 for 1/- fee. £100 for 2/6 fee.
Tyrone,	£50 for 1/- fee. £100 for 2/6 fee.
MUNSTER :	
Clare,	£75. 1/- fee in all cases.
Cork,	£150 in West Riding and £200 in East Riding. 1/- fee in all cases.
Kerry,	£20 for 1/- fee. £100 for 2/6 fee.
Limerick,	£30 for 1/- fee. Unlimited for 2/6 fee.
Tipperary, N.R.,	£30 for 1/- fee. £125 for 2/6 fee.
Tipperary, S.R.,	£30 for 1/- fee. Unlimited for 2/6 fee.
Waterford,	£50 for 1/- fee. £150 for 2/6 fee.
LEINSTER :	
Carlow,	£100 for 1/- fee. £200 for 2/6 fee.
Dublin,	No limit. 1/- fee in all cases.
Kildare,	£75 for 1/- fee. £150 for 2/6 fee.
Kilkenny,	£50 for 1/- fee. £100 for 2/6 fee. All cows provisionally selected or registered under Dairy Cattle Scheme to be served at 1/- fee.
King's,	£100. 1/- fee in all cases.
Longford,	£100. 1/- fee in all cases.
Louth,	£25 for 1/- fee. Unlimited for 2/6 fee.
Meath,	£50 for 1/- fee. £100 for 2/6 fee.
Queen's,	£40 for 1/- fee. Unlimited for 2/6 fee.
Westmeath,	£50 for 1/- fee. £100 for 2/6 fee.
Wexford,	£100 for 1/- fee. £150 for 2/6 fee.
Wicklow,	£100 for 1/- fee.
CONNACHT :	
Galway,	£30 for 1/- fee.
Léitrim,	£20 for 1/- fee. Unlimited for 2/6 fee.
Mayo,	£18. 1/- fee in all cases.
Roscommon,	£20. 1/- fee in all cases.
Sligo,	£25. 1/- fee in all cases.

Out of the funds available under section 49 of the Irish Land Act, 1909, the Department granted special premiums to selected applicants in the congested counties and sold at reduced

prices a limited number of Kerry and Galloway bulls to residents in the poorer localities in these counties.

The extent to which the Department during the past season supplemented in this manner the work of the county committees concerned is shown by the following figures :—

County.	No. of Special Premiums in 1913.	No. of Bulls sold at reduced prices during 1913.	No. of Bulls sold at reduced prices in previous years and retained for service in 1913.	Total.
Clare,	14	—	—	14
Cork,	14	2	3	19
Donegal, . . .	42	1	2	45
Galway, . . .	21	7	19	47
Kerry,	36	5	4	45
Leitrim, . . .	12	—	—	12
Mayo,	28	11	16	55
Roscommon, .	14	—	—	14
Sligo,	14	—	—	14
Totals, . . .	195	26	44	265

In 1912 the number of such special premiums was 189 and the number of bulls sold at reduced prices was 26.

The total number of bulls standing in the country during 1913 under the general cattle-breeding scheme was 1,165, viz., 265 placed by the Department under the special arrangements for congested counties and 900 in connection with county schemes.

The scheme for encouraging improvement in the breeds of swine for 1913 (see page [68] of the Appendices) was adopted by every county committee.

As in previous years the Department by furnishing information as to where suitable young boars were for sale in Ireland assisted applicants selected by county committees as keepers of premium boars to procure animals to meet their requirements. By this means 170 boars were purchased from Irish breeders. The supply of suitable sires is still far from adequate, but it is hoped that the steady demand for boars which for some time past has been well maintained will in the near future induce breeders to give greater attention to this class of stock.

The several county committees awarded premiums for boars in 1913 as follows :—

County.	No. of First year premiums.	No. of Second year premiums.	Large White Yorks.	Large Blacks.	White Ulster.	Total.
ULSTER :						
Antrim,	9	5	—	—	14	14
Armagh,	5	2	—	—	7	7
Cavan,	13	5	—	—	18	18
Donegal,	5	5	1	—	9	10
Down,	10	6	1	—	15	16
Fermanagh,	5	3	—	—	8	8
Londonderry,	6	5	1	—	10	11
Monaghan,	12	5	—	—	17	17
Tyrone,	10	3	—	—	13	13
Totals for Ulster,	75	39	3	—	111	114
MUNSTER :						
Clare,	7	3	9	1	—	10
Cork,	19	16	35	—	—	35
Kerry,	9	5	14	—	—	14
Limerick,	5	3	8	—	—	8
Tipperary, N.R.,	6	5	10	1	—	11
Tipperary, S.R.,	3	4	7	—	—	7
Waterford,	3	—	3	—	—	3
Totals for Munster,	52	36	86	2	—	88
LEINSTER :						
Carlow,	4	—	2	—	2	4
Dublin,	2	—	2	—	—	2
Kildare,	3	1	4	—	—	4
Kilkenny,	6	6	12	—	—	12
King's,	8	8	13	1	2	16
Longford,	8	3	6	4	1	11
Louth,	3	3	3	—	3	6
Meath,	3	1	3	1	—	4
Queen's,	5	7	10	—	2	12
Westmeath,	3	4	3	2	2	7
Wexford,	14	9	20	2	1	23
Wicklow,	4	1	5	—	—	5
Totals for Leinster,	63	43	83	10	13	106
CONNAUGHT :						
Galway,	17	11	28	—	—	28
Leitrim,	1	3	1	2	1	4
Mayo,	11	15	24	2	—	26
Roscommon,	11	7	14	4	—	18
Sligo,	4	7	11	—	—	11
Totals for Connacht,	44	43	78	8	1	87
Totals for Ireland,	234	161	250	20	125	395

As in the case of cattle the Department supplemented the work of county committees in connection with the swine breeding scheme in congested counties by granting special premiums to selected applicants. In 1913, 113 such premiums were awarded as under :—

County.	No. of First year premiums value £5.	No. of Second year premiums value £3.	Total.
Clare,	4	1	5
Cork,	3	4	7
Donegal,	6	5	11
Galway,	12	14	26
Kerry,	8	4	12
Leitrim,	3	—	3
Mayo,	14	12	26
Roscommon,	6	6	12
Sligo,	7	4	11
Totals,	63	50	113

The operations of the swine scheme during the past five years are summarised in the following table :—

Year.	Money allocated by County Committees for Boar Premiums.	Money expended by County Committees for Boar Premiums.	Number of Premiums awarded by County Committees.	Number of Special Premiums provided by Department for Congested Districts.	Total number of Boars standing in Ireland during Service Season.
1909, .	£ 1,700	£ 1,252	310	49	359
1910, .	1,694	1,419	336	80	416
1911, .	1,801	1,538	320	97	417
1912, .	1,920	1,604	385	106	491
1913, .	2,066	1,639*	395*	113*	508*

* Estimated.

In three counties, viz., Antrim, Down, and Tyrone, the county committees arranged for the placing of rams in the mountain districts—the number of black-faced rams purchased for the counties named were nine, ten, and six respectively.

The Westmeath county committee in 1912 inaugurated an experimental scheme for the improvement of sheep-breeding, allocating a sum of £24 therefor. Premiums value £4 and £2 were offered for shearing rams and ram lambs to serve 50 and 20 ewes respectively. No service fee was charged, but

the owner of each ewe sent for service was required to pay a sum of 4s. to cover the cost of pasturage, which the ram owner was obliged to provide during the service season. The experiment was renewed in 1913 but so far has not proved a success, as only one applicant was selected each year to keep a ram of the approved type.

Prizes for sheep were provided at the several live stock shows subsidised by county committees.

The Department as heretofore sold at reduced prices a number of blackfaced rams to residents in the congested counties. The numbers sold in each of the past nine years were as follows :—

Year.					No. of Rams.
1905, .. .. .	..	..	..	..	15
1906, .. .. .	..	..	..	..	79
1907, .. .. .	..	..	..	..	117
1908, .. .. .	..	..	..	..	102
1909, .. .. .	..	..	..	..	86
1910, .. .. .	..	..	..	..	98
1911, .. .. .	..	..	..	..	101
1912, .. .. .	..	..	..	..	127
1913, .. .. .	..	..	..	..	103

For a copy of the scheme of subsidies to shows see page [69] of the Appendices.

SUBSIDIES TO SHOWS. The improvement noted in last Report as to the observance by show societies of the regulations of the scheme has been well maintained. For the purposes of these subsidies in 1913 a gross sum of £8,504 was allocated by the several county committees of which £6,171 was actually expended, as shown in the following table :—

Year.	Amount allocated by County Committees.	Number and Value of Subsidies actually paid to					
		Agricultural Shows.		Skilled Labour Competitions (Ploughing Matches, etc.)		Local Competitions (Poultry Trussing, etc.)	
		Number.	Value.	Number.	Value.	Number.	Value.
	£		£		£		£
1909	7,435	146	6,746	59	265	58	112
1910	6,784	135	6,112	59	259	2	31
1911	6,670	141	5,948	71	313	—	—
1912	6,604	152	5,919	78	357	—	—
1913	6,564	155	5,774	83	397	—	—

In accordance with the requirements of the scheme certain show societies which received subsidies provided special classes for registered dairy cows and their progeny as well as for registered Irish draught mares and their progeny by sires of the same breed.

Special grants for prizes for butter-making, poultry plucking, poultry trussing, and for dairy cattle were made by the Department to show societies in the following counties last year, viz., Antrim, Cork, Down, Kilkenny, Limerick, Londonderry, Monaghan, Sligo, Tipperary (S.R.), Tyrone, and Waterford. These special grants amounted to £170 in the aggregate. Demonstrations with improved types of farm implements, such as manure distributors, haymaking machines, potato diggers, etc., were carried out by the Munster Agricultural Society and by the Royal Ulster Agricultural Society. The expenditure involved by these demonstrations (£56) was borne by the Department.

During the year under review the Committees of the following old-established societies, viz., the Sligo Agricultural Society, the Strabane Agricultural Society, and the Waterford Agricultural Society, asked the Department to help in the endeavours then being made by the members to place these societies in a satisfactory financial condition. Having investigated the working of the societies and ascertained that the members of each society had made a special effort to reorganise its finances the Department promised a contribution to each society on compliance with certain conditions, and when these conditions had been carried out the promised grants amounting in all to £607 were paid.

(c) SPECIAL INVESTIGATIONS.

For particulars of the field experiments conducted in 1912-13 by the instructors in agriculture see

FIELD APPENDICES pages [115] to [121] and [124].
 EXPERIMENTS AND DEMONSTRATIONS. The experiments under these schemes are uniform for the entire country, and, as a rule, each instructor carries out one or two experiments on each of the principal crops grown in his county. In addition special experiments bearing on problems of particular local interest were during 1913 conducted by many of the instructors.

The general experiments embrace manurial and variety tests with the principal farm crops; special manurial tests with different crops grown on peaty soils; an experiment with seaweed as manure for potatoes; an experiment with different forms of lime; tests with various nitrogenous manures, as well as experiments with sugar beet.

The general scheme of experiments is revised from time to time as may be found necessary, and new experiments are being constantly introduced.

The number of experiments of each class undertaken by the

itinerant agricultural instructors in respect of each of the principal farm crops in 1912 and 1913 is given in the following table :—

Crop	Manurial Experiments		Variety of Seed Experiments		Other Tests		Totals	
	1912	1913	1912	1913	1912	1913	1912	1913
Potatoes, .	91	120	66	61	46	43	203	224
Turnips, .	102	108	45	45	—	—	147	153
Mangolds, .	47	55	34	39	—	—	81	94
Oats, .	35	44	28	35	—	—	63	79
Wheat, .	—	—	17	11	—	—	17	11
Barley, .	—	—	10	16	—	—	16	16
Hay, .	38	50	—	—	—	—	38	50
Miscellaneous	73	36	27	42	40	45	145	123
Totals .	301	413	227	259	86	88	704	750

The results of the experiments carried out in 1912 were collated and published in the Department's JOURNAL. The particulars were subsequently issued as leaflets Nos. 36 to 41 inclusive.

At present the results of the 1913 experiments are being prepared for publication.

The numbers of demonstration plots laid down by the agricultural instructors in 1912 and 1913 were 2,118 and 2,003 respectively.

In the autumn of 1912 Mr. Frank Barbour of Lisburn again undertook the direction of the Department's schemes for the improvement of the flax growing industry and an inspector was appointed to assist him in this work. The Department desire to record their appreciation of the valuable services rendered them in this connection by Mr. Barbour.

The plan of the general manurial and seed experiments conducted at 10 centres in 1912 was identical with that of the three previous years, and these 1912 trials completed the third series, each of which has been carried out by the Department for four successive seasons. In that year comparative tests of Irish saved and other seeds were undertaken, as were also experiments designed to test the influence on flax of lime applied in the previous year to oats which preceded the flax. The produce was scutched during the 1912-13 season. The saving of seed from selected plants was again continued. The 1912 crop, from which the selection was made, lodged badly, and an effort was therefore made to effect a separation of the long stalks when the dried straw was ripped in the spring of 1913. The seed so obtained germinated well and was sown for trial purposes alongside imported seed. Full details and results of these various experiments

will be published in an early issue of the Department's JOURNAL and also in leaflet form.

The plan of the fourth series of manurial experiments commenced in 1913 was drawn up in the light of the results from the previous series, and the new trials are designed with a view to affording information as to the influence (1) of different quantities of muriate of potash, and (2) of sulphate of ammonia both when used singly and in combination with muriate of potash. This new series of experiments was commenced at 10 centres in the Magherafelt, county Londonderry, district, and the produce of these plots and also of the seed plots has not at the time of writing, been scutched.

During the year under review no new co-operative flax society was established. The services of one of the Department's flax experts were placed at the disposal of the four county Donegal societies which continued their operations. The advice of this expert was also largely availed of by private mill-owners in the district. Another instructor, who had been stationed at Castlefin, county Donegal, for several years, was transferred to Rathfriland, county Down. A flax instructor was retained in county Mayo—where 100 acres more flax was grown than in 1912—and the county Cork growers were afforded the assistance of an instructor, and, during the spring and summer, also of an assistant instructor. Though no increase in the area devoted to flax in county Cork is reported there was considerable improvement in the management of the crop both by the growers and mill-owners.

Seven of the eight apprentices who were trained in 1911-12 were appointed at the beginning of 1913 as instructors in districts in which there were possibilities of an extension of the area usually under flax, or where there was much scope for improvement in the cultivation and handling of the crop. The respective headquarters of these instructors are Ballyclare, county Antrim; Newtownhamilton, county Armagh; Cootehill, county Cavan; Carndonagh, county Donegal; Milford, county Donegal; Monaghan, county Monaghan; and Dromore, county Tyrone. In addition to giving personal advice to flax growers these instructors laid down in 1913 seventy sets of field demonstration plots which were designed to show the influence of manures and to afford a comparison of the produce from different seeds. There is already evidence that their work has stimulated greater interest in the growth of flax and its preparation for the market. The eighth apprentice was assigned to work in connection with the Department's flax experiments.

Eight more flax apprentices were selected by competitive examination in October, 1912, and have since, under the supervision of a scutch mill-owner who is also an extensive flax grower near Coleraine, undergone a year's special course of training in the various operations connected with the cultivation, handling, retting, scutching, and marketing of the crop.

In 1912-13 two leaflets, No. 4 and No. 29 (revised), were issued for the guidance of flax growers. The former deals with the sale of flax and advocates an extension of the open market system in preference to the practice, still customary in many districts, of sale at the scutch mills. The latter leaflet comprised a summary of the reports on the Russian and Dutch flax seed harvests annually furnished to the Department.

Prior to the opening of the 1913-14 scutching season efforts were made by local authorities, or by committees specially constituted for the purpose, to open or re-establish flax markets in four Ulster towns which are situated in districts where flax is largely grown. For the promotion of this object the local flax instructors and other officers of the Department rendered their assistance at various conferences of the parties interested—the growers, scutch mill-owners, and spinners' representatives. Attention was also given by the Department to the marketing of flax grown in county Cork.

During the year two loans were granted to scutch mill-owners: one towards the cost of erection of a turbine and the other for the enlargement of a scutch-mill.

Grants in part payment of the wages of approved mill foremen who trained local workers were made to three mill owners in counties Cork, Donegal and Mayo.

Experiments on the ventilation of scutch mills were devised, and are, at the time of writing, in progress. These are being conducted under the supervision of an engineer who has had extensive experience of ventilation problems in connection with other industries in which large quantities of dust are produced.

Under the Department's scheme for the improvement of the flax growing industry the agricultural committees of counties Cork, Fermanagh, and Monaghan offered prizes for flax on foot during 1913. The total number of entries received was 265 and a sum of £127 5s. was awarded in prize money.

A copy of the Department's scheme will be found at page [73] of the Appendices.

The experiments on sugar beet growing instituted in 1911 were somewhat modified in 1912, when

SUGAR BEET. they were carried out by 12 agricultural instructors. The modifications were:—

(1) the inclusion of a plot on which the beet was grown in moulded-up drills, and (2) the use of nitrate of soda applied to half of each plot at the rate of 1½ cwt. per statute acre.

The summer of 1912 was not favourable to the growth of sugar beet, for owing to the excessive rains which fell during the months of June, July, and August the crop did not thrive. The ripening of the roots (and hence their sugar content) and also the yield were, however, favourably influenced by the drier and warmer weather and clearer skies in the months of September and October.

Through an oversight, nitrate of soda was not applied at one centre. The average yields and sugar contents at the remaining 11 centres are given in the following table, which also includes the corresponding returns for 1911 from eight centres :—

Year.	1912.			1911.		
	Average yield of Roots per Statute Acre.		Average Sugar content of roots.	Average yield of Roots per Statute Acre.		Average Sugar content of roots.
	Gross Weight.	Factory Weight.		Gross Weight.	Factory Weight.	
Plots.	T. C.	T. C.	%	T. C.	T. C.	%
Ordinary Drills :—						
(a) Without Nitrate of Soda,	13 17	9 17	18.2	12 16	14 3	18.2
(b) With Nitrate of Soda,	15 5	10 14	17.9	—	—	—
Moulded-up Drills :—						
(a) Without Nitrate of Soda,	14 2	10 5	18.4	—	—	—
(b) With Nitrate of Soda,	15 10	11 6	18.2	—	—	—
On the Flat :—						
(a) Without Nitrate of Soda,	13 17	10 10	18.3	20 8	17 8	18.7
(b) With Nitrate of Soda,	16 6	12 3	18.2	—	—	—

A detailed report on the experiments under review was published in the Department's JOURNAL and was also issued in pamphlet form.

Similar experiments with sugar beet were conducted in 1913 at 12 centres. The results, however, are not available at the time of writing.

During the year under review the Department's resident horticulturists carried out the supervision of the fruit plots established in connection with this experiment. These plots contain a total area of 199 acres and are situated at the following centres, viz.: Piltown, Clonmel, Broadway, Dungarvan, Newmarket-on-Fergus, Mountbellew, Moneymore, and Ballymoney. As mentioned in last Annual Report these experiments will not be extended further as the Department are now encouraging the plantation of fruit trees, especially apples, on a commercial scale by granting loans on easy terms to associations of fruit growers in any district in Ireland. Particulars of the conditions on which loans are available will be found on page [112] of the Appendices.

A report, bringing the results of the experiments in the cultivation of tobacco, which are being conducted under the Department's supervision, down to the end of the season 1912 appeared

TOBACCO.

in the issue of the Department's JOURNAL for January, 1913.

Five manufacturers purchased the tobacco grown in 1911. Types of cigars, cigarette, and pipe tobacco were included in the crop, and all were reported as quite useful for their special purposes, though it was generally considered that types suitable for pipe smoking showed the greatest promise.

All the tobacco grown in 1912 under the Department's supervision, with the exception of the crops grown at two centres, has been disposed of to manufacturers, the average price obtained being 4½d. per lb. The prices obtained for pipe varieties ranged from 2½d. to 7d. per lb., and for cigarette varieties from 3d. to 7d. per lb.

Large Scale Experiments.—The following table shows the areas cropped at the different centres where large scale experiments were carried out in 1913 under the Department's supervision :—

	Acres.
Adare, county Limerick,	10
Athlumney, county Meath,	10
Cordangan, county Tipperary	10
Duleek, county Meath,	1
Mullagh and Mullacrew, King's county,	14
Randletstown, county Meath,	20
Smarmore, county Louth	18
Tagoat, county Wexford,	12½
Total,	95½

A grant at the rate of £50 per acre is payable by the Department in respect of 92 acres of this area. The extra 3½ acres were grown by the experimenters under ordinary licence, and no grant is payable in respect of them. The results obtained therefrom will, however, be included with those obtained from the area in respect of which the subsidy is payable.

The experiments in the growing of cigarette tobacco which were being conducted at Talbots Inch, county Kilkenny, by the late Captain the Hon. O. Cuffe were not continued in 1913.

"Small Growers' " Scheme.—This scheme, which was inaugurated in 1910 in order to test the suitability of tobacco as a profitable crop for small holders, was continued for the fourth successive year. In 1913 the area cropped was as follows :—

		Area cropped. Acres.
Adare	Centre, 1 small grower	1
Athlumney	" 3 " growers	2½
Randletstown	" 39 " growers	48½
Smarmore	" 1 " grower	1
Total,	44	53½

Of the total area, namely 148½ acres, grown under the Department's schemes 139½ acres were planted with pipe varieties and 9½ acres with cigarette varieties.

In addition to those carrying out experiments under the Department's supervision, 16 persons took out ordinary licences in 1913 to grow tobacco in Ireland. The total area cropped by them was 13 acres approximately.

The present series of experiments in tobacco growing terminates with the season 1913, and a final report will be made thereon as soon as all the required information in respect of the 1913 crop is available.

The Treasury had approved of advances to the extent of £3,500 per annum for 10 years being made from the Development Fund, for the purpose of further experiments in tobacco cultivation in Ireland, and the question of advancing a further £3,500 per annum for a similar period, making a total of £7,000 per annum, was under the consideration of the Treasury at the end of the year under review. It was contemplated that the experiments to be financed out of the grant already approved would have been begun in 1913, but, owing to the difficulties experienced in formulating a scheme the conditions of which would be acceptable to all parties concerned, it was not possible to commence operations in 1913. It is expected, however, that the new scheme will be fully in operation in 1914.

The season of 1913 was, on the whole, quite favourable for the tobacco crop. Although the spring was extremely wet and the summer was excessively dry, these extremes had the effect only of making the tobacco about a fortnight late in maturing, and of decreasing the size of the leaves in some of the crops. The harvesting and curing seasons were fairly favourable, and no untimely frosts occurred. The yield and quality of the tobacco promise to be above the average.

Many members of the Dungarvan and Ballinacourty Potato Growers' Association, who were satisfied

MARKETING OF EARLY POTATOES. with the results obtained by selling their produce at prices fixed in advance, the potatoes to be packed in chip baskets (supplied by the buyer), contracted last summer to sell the bulk of their estimated produce on the same system; but, as the crop matured later than usual, the buyers very considerably agreed to alter the contract dates for delivery. Had it not been for this modification in the terms of contract the growers would have suffered heavily; as it was, they were obliged under their contract to sell their potatoes for less than could have been obtained on the open market. In previous years these growers benefited by the more or less constant assistance and supervision afforded by two of the Department's officers, who endeavoured to see that the terms of contract were complied with, as to grading and packing. Such assistance was not afforded in the past season, as it was considered that the growers ha

acquired sufficient experience. Unfortunately, they do not seem to have exercised proper care, as the buyers complained of frequent cases of short weight and inferior quality.

A number of new growers in Sligo had small quantities of early potatoes to sell, in addition to which the members of the North Sligo Potato Growers' Association had an output much the same in quantity as in the previous season. The Department arranged with a firm of buyers of good repute to have a representative in the district who would purchase all early potatoes offered, thus relieving the growers of all trouble as to supplying packages or finding markets. This system worked satisfactorily, the buyers having taken at good prices all marketable potatoes offered. The same firm purchased a quantity of potatoes from the Clonakilty growers.

The Department's market representative in Great Britain was successful in inducing some important British buyers who hitherto had not handled Irish early potatoes to buy some. These firms were well satisfied, and will probably buy Irish potatoes more largely next season. It is satisfactory to find that Irish grown early potatoes are finding favour on Lancashire markets. As evidence of this, it may be mentioned that two English firms had buying representatives at Rush, county Dublin, during the digging season.

MARKETING OF FRUIT. The practice of packing blackberries in casks containing about 100 lbs. of berries, in lieu of using large casks capable of holding 3 cwt. or more, has extended with satisfactory results.

The Department have been informed by several British buyers that Irish shippers during the past two seasons have effected a considerable improvement in both the grading and the packing of these berries. Buyers and shippers alike testify to the fact that this satisfactory condition of the trade has been effected through the introduction of the smaller casks recommended by the Department. In some cases, however, buyers prefer to purchase English blackberries for making jam or jelly. The reason assigned by these buyers is that some of the shipments from Ireland are inferior, due to the admixture of unripe berries, as well as leaves, stalks, etc. This state of affairs will not be remedied until Irish shippers, when purchasing berries from the gatherers, discriminate in the price they pay for berries badly gathered and for those carefully gathered.

There is a distinct tendency on the part of Irish shippers of apples to improve their methods of grading and packing, but there is still room for much improvement in the case of many shippers. The apple crop of 1918, however, was so much below the average in both yield and quality that it is probable the supply of late apples of good quality will hardly suffice to meet the demand for home consumption.

The arrangement for the training of apprentices in poultry fattening at the Castle Poultry Farm, Rathdrum, of which Mr. A. Lucas is the owner, was continued during the past year and will be renewed for the ensuing season.

**POULTRY
FATTENING.**

Of the three apprentices who were in training at the beginning of 1912-13 two completed their courses in July 1913 and were approved by the Department as qualified to act as poultry fatteners. They have since obtained employment in this capacity. One apprentice was admitted for training in January, 1913, and is still at the Castle Poultry Farm undergoing instruction.

It was not found possible to arrange this year for a supplementary course in the fattening and trussing of fowl, grading of eggs, etc., for the benefit of county instructors.

During the year under review three private poultry fattening stations were in receipt of subsidies towards the cost of employing qualified fatteners. The rate of subsidy in two cases was 15s. a week and payment of this subsidy ceased in May, 1913. In the case of the third station the subsidy was at the rate of 25s. a week up to May, 1913, from which date it was reduced to 15s. a week and payment will cease in May, 1914.

On the whole, it may be said that the tendency to grade and pack eggs properly continues, but as heretofore the reputation of Irish eggs on the markets of Great Britain is seriously impaired by the practice of a certain class

**MARKETING
OF EGGS.**

of shipper to sell, as fresh, eggs which have been held over. There appears to be a distinct movement on the part of the better class shippers in favour of testing eggs for freshness by means of the light test.

Many complaints have been received from British buyers as to the use of unsuitable packages by shippers of eggs from this country. It is regretted that a number of shippers have as yet failed to adopt the packages recommended by the Department as the result of numerous tests with several styles of packages. See Appendices pages [132] to [135].

The first egg-laying competition held in Ireland was conducted during the past year at the Munster Institute, county Cork. The trial covered a period from 1st October, 1912, to 31st August, 1913. There were 52 pens entered

**EGG-LAYING
COMPETITION.**

for the competition (including one control pen from the Munster Institute which did not compete for money prizes), each pen consisting of 6 pullets hatched after 1st January, 1912. The competition was confined to the breeds recognised under the Department's poultry keeping scheme, 1911-12, and prizes and certificates were offered for (1) value of eggs, (2) weight of eggs, and (3) number of eggs. In addition to these there were special prizes provided for (1) the greatest number of eggs pro-

duced by any pen between 1st October, 1912, and 31st January following, (2) the highest score made by a pullet of the non-sitting breed during the competition, and (3) the highest score made by a pullet of the sitting breed during the competition. As the trial was carried out under conditions which affect the average poultry-keeper in Ireland, the result of the competition will give a fair indication of the satisfactory results that may be achieved in the production of eggs by giving due consideration to the feeding, breeding, and housing of fowl.

The conditions under which the competition was held will be found at page [126] of the Appendices. Particulars of the result of the trials and of the prizes and certificates awarded were published in the Department's JOURNAL.

The Department, through their scheme for improvement in the management of creameries (see page [96] of the Appendices) aim at promoting the manufacture and marketing of dairy produce in Ireland by

IMPROVEMENT IN
THE MANAGEMENT
OF CREAMERIES.

- (1) affording to creameries the services of instructors in dairying, who give advice on all matters relating to creamery management;
- (2) publishing, periodically, lists of those creameries visited by the instructors which have attained a satisfactory standard;
- (3) holding surprise butter inspections, to which the manager of each creamery included in the published list sends samples of the butter made at his creamery, with a view to ascertaining how it compares in quality with the butter from other creameries, and what defects, if any, require to be remedied;
- (4) contributing to the expenses of surprise butter inspections held by local associations of creameries.

The extent of the Department's operations under the scheme during the year under review is shown by the following tables:—

(1) *Visits of Instructors in Dairying.*

(2) *Publication of Lists.*

Year ended 30th Sept., 1913	Number of Places visited by Instructors in Dairying	Number of Visits made by the In- structors*	List of Creameries and Auxiliary Creameries published in accordance with Clause 8 of the Scheme		
			Date of Issue	No. of Creameries on List	No. of Auxiliary Creameries on List
Creameries, Auxiliary Creameries,	191 227	1,098 926	1st Nov., 1912, . 8th May, 1913, .	113 122	122 131
Totals,	418	2,024			

* Eight instructors in dairying were engaged on this work.

(3) *Surprise Butter Inspections held by the Department.*

Telegrams issued during the year ended 30th Sept., 1913	Exhibits judged	Number of exhibits
23rd October, 1912, .	30th October, 1912, .	92
4th December, 1912, .	11th December, 1912, .	72
12th February, 1913, .	19th February, 1913, .	24
4th April, 1913, .	10th April, 1913, .	79
16th May, 1913, .	20th May, 1913, .	106
9th July, 1913, .	17th July, 1913, .	118

(4) *Surprise Butter Inspections held by Local Associations.*

Name of Association conducting Inspection	Number of Creameries comprising Association	Number of Inspections held during year ended 30th Sept., 1913
Kerry Dairy Association, .	10	1
North-West Dairy Association, .	14	5
Suir Valley Creameries' Association, .	16	4
West Limerick Creamery Association, .	16	2

(5) *Training of Creamery Managers.*—The annual course of instruction for creamery managers and young men intending to qualify for the position of creamery manager was held at the Department's agricultural station, Ballyhaise, county Cavan, during the period 8th October, 1912, to 7th March, 1913. As a result of a qualifying examination, to which the students were submitted at the conclusion of the course, four pupils were chosen, who, not having received a practical training at a creamery, were desirous of perfecting their knowledge of creamery management. Each of these pupils was located by the Department at a selected creamery, and is at present serving an apprenticeship of thirty weeks under a capable manager.

During the winter 1912-13 short courses of instruction for creamery managers, occupying from four to five weeks each, were held under the auspices of various branches of the Irish Creamery Managers' Association, as follows:—

Name of Association which organised Course	Places at which Course was held	Number of Creamery Managers who attended
Fermanagh Branch, Irish Creamery Managers' Association, .	Enniskillen, .	18
Co. Monaghan Branch, Irish Creamery Managers' Association, .	Clones, .	13
Limerick Branch, Irish Creamery Managers' Association, .	Barrington's Bridge, Limerick, .	20
Nenagh Branch, Irish Creamery Managers' Association, .	Silvermines, Nenagh, .	14
Kilmallock and Charleville Branch, Irish Creamery Managers' Association, .	Charleville, .	16
Sligo Branch, Irish Creamery Managers' Association, .	Collooney, .	24

The Department's instructors in dairying acted as teachers, and the Department contributed towards the cost of the courses.

(6) *Examination for Creamery Certificates.*—The annual examination for certificates in subjects relating to creamery management was held at the Department's agricultural station, Ballyhaise, county Cavan, on the 4th, 5th, and 6th March, 1918, and was attended by seventeen candidates, including the students who had just completed their course of instruction in creamery management at the agricultural station. A "Creamery Manager's Certificate" was awarded to one of the candidates who, in addition to passing the examination, satisfied the Department with regard to his practical ability as a creamery manager. Certificates of having passed the examination in theoretical subjects were awarded to six other candidates.

(7) *Training of Dairymaids in Creamery Work.*—As a result of the terminal examinations held at the conclusion of their course of instruction as third term students, eleven pupils of the Munster Institute, Cork, and four pupils of the Ulster Dairy School, Cookstown, were offered facilities by the Department for obtaining a practical training as dairymaids at creameries. Of these, nine pupils from the Munster Institute and three pupils from the Ulster Dairy School took up the course of training. Six completed their training during the year, and were awarded certificates by the Department. The remainder are still receiving instruction at creameries.

During the winter a short course of instruction for butter makers employed at creameries was held at Killygordon and was attended by ten pupils. The course was organised by the North-West Dairy Association. The Department provided the services of one of their instructors in dairying as teacher, and gave a grant towards the expenses of the course.

(8) *Investigation into Composition of Irish Cheese.*—This investigation, which was instituted with a view to ascertaining the relationship between the percentage of fat in cheese and the percentage of fat in the whole milk from which the cheese is made, was brought to a conclusion this year. A report on the subject will be made in due course.

The experiment commenced at Drumholm creamery last year

WINTER
DAIRYING.

was continued during the year under review. There was a decided increase in the quantity of milk received in the months of December, January, February, and March as compared with the quantity received in the corresponding period of the previous year, and the results seemed to show that a price equal to 5d. per gallon could be paid during the four months named without sustaining a loss. The system of keeping creamery accounts advocated by the Department has been adopted with satisfactory results at this creamery, as

well as at a number of other creameries in various parts of the country.

At Lissarda Creamery the experiment in winter dairying was not proceeded with as the conditions on which it was undertaken were not adhered to by the proprietors of the creamery.

The number of cows entered in the year 1912-13 for inspection with a view to provisional selection for registration under the Department's Scheme
 REGISTRATION OF DAIRY CATTLE. No. 20 (see page [106] of the Appendices) was 804. Of the animals offered, 534 were provisionally selected, 20 were not presented for inspection, and 250 were rejected as unsuitable.

These figures include the figures for cattle of the Kerry type. 105 Kerry cows were entered for inspection in 1912, and of these 68 were passed. The number of Kerry cows now registered is 67.

During the year 58 pure-bred cows were submitted for inspection, and all were provisionally selected.

The male progeny of registered dairy cows and approved sires are eligible for provisional selection for premiums under the Department's cattle breeding scheme. Of 101 bulls offered for inspection for this purpose in 1912-13, 60 were found suitable and were entered in the register as "Registered Dairy Bulls." The number of such bulls which has been entered in the register is 155.

As in the preceding year, the Department continued to afford the services of two special instructors to
 COW-TESTING explain, at meetings of dairy farmers and
 ASSOCIATIONS. elsewhere, the objects and advantages of cow testing, and to assist in the establishment and successful working of cow-testing associations. They also promised a grant to secretaries of associations at the rate of 1d. per cow per monthly test towards the cost of testing the milk for butter-fat, recommending at the same time that this grant should be supplemented by contributions from the members.

The number of associations which had been formed at the 30th September, 1913, was 69, as compared with 42 in 1912 and 12 in 1911. In the main these associations were established in connection with co-operative creameries throughout the country, the members being milk suppliers to the creameries, the managers of which usually acted as secretaries and tested the milk samples. The associations were formed as follows:—

- 3 in co. Antrim.
- 2 in co. Cavan.
- 11 in co. Cork.
- 4 in co. Donegal.
- 4 in co. Fermanagh.
- 6 in co. Kerry.

- 1 in co. Kilkenny.
- 10 in co. Limerick.
- 1 in co. Monaghan.
- 1 in co. Sligo.
- 12 in co. Tipperary.
- 12 in co. Tyrone.
- 2 in co. Wexford.

Of the cows tested in cow-testing associations during 1912, the yields of which had come up to the standards laid down in the scheme, 357 were, after inspection by the Department, accepted for entry in the Department's register as being of good conformation and well-defined type.

Under the Department's cattle-breeding scheme a county committee of agriculture may permit a premium bull to be reserved for the exclusive use of a cow-testing association.

Caerphilly Cheese.—The experimental manufacture of Caerphilly cheese at the premises of the Knockavardagh Co-operative Creamery Company, Limited, county Tipperary, and the Shandon Dairy Company, Dungarvan, county Waterford, was completed at the end of the year 1912.

The results were very successful, the general quality of the cheese being liked by the buyers. Sales at satisfactory prices were readily effected.

At both premises the whey was utilised for feeding pigs.

Allowing for the value of the separated milk from butter-making at 1d. per gallon, and of the whey from cheesemaking at $\frac{1}{2}$ d. per gallon, the net profits on the manufacture of this type of cheese during the year 1912 exceeded the profits which would have been made if the same milk had been converted into butter. The manufacture of this cheese will thus afford a remunerative method of disposing of whole milk, more especially during the winter months when the prices for the cheese are high. During the year five more creameries commenced the manufacture of Caerphilly cheese.

Derby and Cheddar Cheeses.—The Department are about to test the manufacture of Derby and Cheddar cheese at these factories, so that these types of cheese may be produced as alternatives to Caerphilly should the price of the latter fall at any time.

Seven cheesemakers trained by the Department, including those engaged by the Knockavardagh Creamery and the Shandon Dairy Company, are now in employment. Four pupils have just completed a course of training in cheesemaking under an expert maker in Somersetshire.

In order to cope with the increasing number of applications for advice on matters relating to cheesemaking, the Department have now appointed an instructor whose services will be available for the creameries or cheese factories which are included in

the list of creameries visited by the Department's instructors in dairying.

The scheme of experiments in the feeding of live stock (full details of which are given in Division B of the scheme of agricultural experiments printed on page [121] of the Appendices to this Report), introduced in 1912, was continued under the supervision of itinerant instructors in agriculture on exactly the same lines as in the previous year.

These experiments were carried out in 26 counties and the number of each class undertaken during the year 1912-13 was as follows :—

Number of Experiment in Scheme.	Nature of Experiment.	Number undertaken.
I. (Pigs)	To ascertain whether pigs can be fattened profitably without potatoes,	15
II. (Pigs)	To test home-grown as compared with imported feeding stuffs,	9
III. (Calves)	To test oatmeal as compared with wheatmeal in meal mixtures,	16
IV. (Cattle on grass)	To test home-grown as compared with imported feeding stuffs,	8
V. (Cattle in stalls)	To test home-grown as compared with imported feeding stuffs,	13
Total,		61

At the conclusion of the period under review the results of these experiments were being prepared for publication.

The results of the live stock experiments conducted during the year 1911-12 were published in the Department's JOURNAL and also issued in leaflet form.

The dead meat society at Drogheda continued its operations during 1912-13. The Department's grant to the society towards the provision of technical instruction and expert advice, i.e., the services of a qualified instructor and of an expert butcher for one year, was administered by the Louth county committee of agriculture, and was exhausted in December, 1912. During the year 1912 over 900 cattle and 1,100 sheep were dealt with at this centre and exported as dead meat. The Department decided to renew the grant for technical instruction and expert advice for a further year and the Louth county committee again undertook its administration. The grant became available from May, 1913, but owing to the warm weather and the fact that local prices were satisfactory, very little exporting was carried on during the summer. A well equipped abattoir has been erected with the co-operation of the Department at Drogheda.

The grant afforded by the Department, through the Wexford

county committee of agriculture, to the Wexford society for utilisation on the same lines as that afforded to the Drogheda society, was availed of by the society from February to November, 1912, when the Department were obliged to withhold further payments owing to the society's refusal to comply with the conditions on which the grant had been made.

*As the result of meetings of feeders and others interested in the industry in the Athy district, a dead meat society was formed at this centre and registered in February, 1913. The Department assisted the promoters in securing information regarding the trade by paying the expenses of a deputation of two feeders who visited London for the purpose. The Department also assisted the society by advising them as to plans, &c., for the erection of an abattoir at Athy, and offered, subject to certain conditions, to make a loan of portion of the cost of the buildings. The Department, further, promised a grant, to be administered by the Kildare county committee of agriculture, for the purpose of providing the services of an organising instructor and expert butcher for one year at this centre.

The promoters of a dead meat industry at Waterford met the Department on several occasions to discuss a project for the erection and equipment of an abattoir at that centre. At the close of the year the scheme appeared to be in abeyance, the pressing need for facilities for a dead meat trade having passed away with the suppression of the outbreak of foot and mouth disease.

In connection with a proposal to establish the industry at Cork, the Department paid the expenses of a deputation, representing the county committee of agriculture and the cattle trading interests in the south, which visited London and Holland in October, 1912, for the purpose of becoming acquainted with the methods adopted there. The county committee of agriculture subsequently sent two representatives to visit Waterford, Wexford, and Drogheda, with a view to seeing how the industry was carried on under Irish conditions. It was then proposed that the Cork county council and the Cork Corporation should each contribute one-third of the cost of the erection of an abattoir, the Department to make a loan of the remaining one-third. It was found, however, that the Cork Corporation were not empowered to levy a rate for the purpose in question, and the Department were accordingly asked to make a loan of half the cost of the erection of an abattoir, the county council to contribute the remainder and the Cork Corporation to provide a free site. The Department intimated their willingness to give favourable consideration to the question of advancing a loan of part of the capital required for the undertaking, and of providing technical instruction and expert advice provided a suitable plan for the working of the abattoir were submitted to them. No further steps appear to have been taken by the promoters in the matter subsequent to the resumption of the live stock trade.

The Westmeath county committee of agriculture, with the approval of the Department, paid the expenses of a deputation to visit London in November, 1912, to make enquiries with a view to ascertaining the prospects of establishing a dead meat trade at Mullingar. The deputation reported favourably in the matter. A temporary abattoir was erected, but as the live stock trade had been resumed before the completion of the building the project was not proceeded with.

The promoters of a scheme for the formation of a dead meat company, and the building of an abattoir, at Dublin, approached the Department in December, 1912, to enlist their support. The Department expressed their willingness to provide technical instruction and expert advice in the initial stages of the work as well as to supply information regarding marketing, transit, &c., in the event of the undertaking being proceeded with.

Applications for financial assistance were received from other centres, but the nature of the applications would not warrant the Department in making grants or loans.

During the year under review 141 samples of spraying materials were received for testing. All the

ANALYSIS OF	samples were found up to standard with
SPRAYING	the exception of two: one, a sample of cop-
MATERIALS.	per sulphate, which was found to contain

about 22 per cent. carbonate of soda, and one sample purporting to be washing soda, which really consisted of equal quantities of washing soda and glauber salts.

The Department would again impress on farmers the necessity of getting their spraying materials, particularly washing soda, tested before use, as there are several soda compounds which closely resemble each other in outward appearance, and the use of a wrong material may easily result in the loss of a whole crop. The Department are prepared to report on such samples for the small fee of threepence and they would be glad to see farmers and merchants availing themselves more readily of this facility.

The special Report on the operations of the Department in
 FERTILISERS AND regard to fertilisers and feeding stuffs, and
 FEEDING STUFFS: weeds and agricultural seeds contains par-
 NOXIOUS WEEDS: ticulars of the work done during the past
 AGRICULTURAL year.
 SEEDS.

Fertilisers and Feeding Stuff.—The Department arranged, as in other years, for the holding of traders' classes at a few centres. Classes, which were fairly well attended, were held this year in Killarney, Listowel, Dungarvan, and Enniscorthy. These classes are intended to afford merchants and their assistants such technical knowledge in regard to manures, feeding stuffs, and agricultural seeds as may be useful to them in their business, particularly in reference to their obligations under the Acts relating to the sale of these commodities. Although the classes

only occupy a few hours each day for about a week, and although those who attended at the different centres where classes have been organised have found the instruction of much service to them, the Department regret that traders in some of the towns visited by the Department's instructor show no great desire to avail themselves of the opportunity of gaining such instruction.

The total number of samples of fertilisers and feeding stuffs examined amounted to 688. Of these it was considered desirable to analyse 353. The number of samples sent in showed a slight decrease on the previous year, due to the fact that the instructors had been directed to devote their attention specially this year to the sampling of agricultural seeds, and thus had less time for sampling manures and feeding stuffs. With the exception of a few highly priced compounds sold in the West, the manure trade continues to be satisfactory. In regard to feeding stuffs, there is still room for improvement, though no instances came under notice, during the year, of sales of any of the expensive and inferior meals which at one time were generally distributed in the country.

Reference was made in the Annual Report for 1910-11 to the prosecution by the Department of an English firm for selling to farmers in county Limerick a feeding stuff (1) without furnishing at the same time the statutory invoice, and (2) for selling a feeding stuff which was seriously deficient in content of oil and albuminoids. The firm were convicted and a fine of £5 with £5 ss. costs imposed in each count. Four of the purchasers of this meal who had declined payment were sued by the firm concerned to recover payment of the amounts due. The cases were heard at Rathkeale Quarter Sessions in October, 1912, before His Honor Judge Law Smith, K.C., who dismissed the claims on their merits, allowing special costs to three officers of the Department who were instructed to attend for the purpose of giving evidence on behalf of the defendant farmers. The Department arranged this year for further experiments with certain high-priced and unsuitable compound manures in certain districts in which these manures were offered for sale. Details of these experiments and of other matters of interest in connection with the Department's work under the Act will be found in the special Report above referred to.

Noxious Weeds.—Part I. of the Weeds and Agricultural Seeds (Ireland) Act, 1909, empowers the Department, subject to the consent of the county council, to schedule certain plants as noxious weeds and to serve notices on the occupiers of land on which such weeds are growing requiring them to be destroyed. This part of the Act is now in force in 25 counties inclusive of two county boroughs. The number of notices served during the year amounted to 12,166. In the vast majority of these cases the notices were complied with to the satisfaction of the Department, but they regret that in as many as 92 cases prosecutions had to be instituted to enforce compliance with the Act.

Agricultural Seeds.—The power of sampling conferred upon the Department by Part II. of the Weeds and Agricultural Seeds (Ireland) Act, 1909, enables them to ascertain not only the quality but also the source of supply of the agricultural seeds sold by every retailer and wholesale vendor in the country. The data thus obtained have shown that the great bulk of the rye-grass seed which reaches the retailer is procured directly or indirectly from about sixteen firms. These are the "seed cleaners," i.e., the firms who buy the seed from the grower and prepare it for the market. As a result of interviews with representatives of these firms at the Department's Offices early in 1913, at which the injury caused to the agricultural interests of the country by the supply of inferior seeds was pointed out, a conference of the Trade at which the Vice-President of the Department was present, took place in Belfast, the centre of the seed cleaning industry, on the 20th February, 1913. As a result of this conference the firms in question entered into a mutual agreement to refrain in future from selling for use as agricultural seed in Ireland perennial and Italian rye-grasses below 18 lb. per bushel and 16 lb. per bushel respectively, brown and white hay seed, and cleanings, blowings, and holcus. These articles have constituted the vast majority of the samples of inferior rye-grass seed hitherto received in the Department's seed testing station. Following on the conference, the Department made a more than usually exhaustive examination of the stocks of seed sold by the wholesale and retail merchants throughout Ireland, but particularly in the West and South-west where most of the inferior seed has hitherto been sold. Unfortunately, at the time the agreement above referred to was made, a number of orders had already been accepted by the seed cleaners for some of the inferior seeds, the sale of which they have agreed to discontinue in future. The Department, however, are pleased to state that, when later on their samplers visited the stores of local merchants, no case was found in which any of the assenting firms accepted such orders subsequent to the date of the agreement. The number of samplers employed was 69; samples were taken at over 1,500 shops and stores, but a much larger number were visited. It was found that seed stocked by one retailer often corresponded exactly as regards appearance and source of origin with that stocked by another, and in such cases it was thought unnecessary to take more than one sample unless the appearance of the seed indicated that it was of inferior quality.

Another conference of the seed cleaners was held on 25th July, 1913. At this conference the following resolution, which was assented to by the sixteen principal firms engaged in the seed-cleaning industry, was unanimously adopted:—

"That we, seed cleaners and merchants, hereby agree, as testified by our signatures hereto, not to sell from

this date, for use as agricultural seeds in Ireland, any white hay, brown hay, cleanings, blowings, holcus (or articles of similar description) or perennial rye-grass under 20 lb. weight per bushel, or Italian rye-grass under 16 lb. weight per bushel."

The effect of this resolution should be to cut off entirely the supply of the great bulk of the most inferior rye-grass seed which hitherto has been placed on the markets.

During the year, a conference of the wholesale seed merchants of Tralee (which is a centre for the distribution of agricultural seeds in the South-west of Ireland) was also held, and an understanding was arrived at that these firms would not in future stock as agricultural seeds articles of the description referred to in the Belfast resolution.

Seeds.—During the period extending from October 1st, 1912, to September 30th, 1918, nearly eight thousand samples of agricultural seeds were received at the seed testing station. The sources from which these samples were derived were as follows:—

SEEDS AND PLANT DISEASES ADVISORY DIVISION.	(a) Samples submitted by Department's staff,	6,762
	(b) Samples received from farmers,	720
	(c) " " " " seed merchants,	473

Of samples (a) 1,382 were tested for purity and germination. The total increase in samples tested for the year under review is 467.

As in previous years, in addition to seed testing routine, investigations regarding the germination and identification of certain classes of seeds were carried out as far as time permitted.

Plant Diseases.—In co-operation with the farm manager at the Albert Agricultural College a series of tests was carried out dealing with the effect of dressing cereal grains with certain preparations, some of which are advertised as being of great service in lessening the depredations caused by birds in seed corn as well as acting as preventives against fungoid diseases, such as bunt and smut. These investigations will be continued for a further period.

The investigations on potato diseases carried out at the temporary station for the investigation of plant diseases at Clifden in county Galway was continued over rather more than seven months of the year, the head of the seeds and plants diseases division and his assistant being in residence at Clifden for a period of about three and a half months during the summer, while an outdoor assistant was present during the whole period.

The diseases to which particular attention was devoted were the same as those mentioned in last year's report, viz., blight, black stalk rot, "doubtful" tuber rot, leaf rot and curl, *Spongospora* scab, *Sclerotium* disease, etc. The usual report on this work in detail will be found in the Department's JOURNAL

It may be mentioned here, however, that the cause of the above so-called "doubtful" tuber rot has now been ascertained to be a new species of fungus allied to the one which causes the ordinary "blight." Its life-history has been fairly completely studied, and the method by which the sexually formed resting spores are developed has proved to be both novel and of considerable scientific interest. It has been found that the resting spores of the blight fungus itself (which have been found in artificial pure cultures) are formed in an analogous manner, but prolonged search for these bodies in the potato plant itself has so far failed to reveal their presence there.

During the period under review a paper dealing with the results of the previous year's investigations at Clifden was published, as well as three other scientific papers dealing with certain potato diseases, while a fourth has been prepared.

Advisory assistance in connection with diseases in plants as well as other matters relating to economic botany was given during the year in about one hundred and fifty instances.

American Gooseberry Mildew and Black Currant Mite (Ireland)

Order, 1912.—During the past year 236

DESTRUCTIVE INSECTS AND PESTS ACTS, 1877 AND 1907.	cases of American Gooseberry Mildew and 73 cases of Black Currant Mite were reported, and in each case the necessary steps were taken under the Order to secure the destruction of affected bushes and the adoption of the requisite preventive measures.
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A series of experiments was again conducted by the Department at three centres to ascertain the effects of spraying and pruning on affected gooseberry bushes. The experiments indicate that nothing short of destroying the bushes by burning will prevent the spread of the disease.

In November, 1912, the Order of 1908 was revoked and a new Order made (see page [129] of the Appendices). The Order of 1908 prohibited the importation into Ireland of gooseberry and currant bushes except under licence from the Department, and this licence could be granted only in the case of bushes to be used for the purposes of experiment or of propagating new varieties. Under the 1912 Order this prohibition has been modified so as to permit the Department at their discretion to grant licences not only for the importation of bushes required for experiment and propagating new varieties, but also of bushes required by nurserymen for renewing the stocks in their nurseries. The bushes are imported only from certain approved cross-channel nurseries in which American Gooseberry Mildew has not been found.

While the Order of 1908 provided for the destruction of those bushes only which were actually diseased at the time the notice was served, a notice issued under the Order now in force may require the burning not only of diseased bushes but of all or any bushes on infected premises. This includes any bushes which,

although apparently healthy, may be considered as affected with the disease by reason of their close proximity to diseased bushes.

Black Scab in Potatoes (Ireland) Order, 1908.—During the season 1912 an officer was again entrusted with the duty of carrying out a thorough inspection of the district around Kilkeel, co. Down, in which some fields had been reported in previous years as being slightly affected with the Black Scab disease. Three further cases were reported, in each of which a few affected tubers were found. The usual notices were served on the occupiers requiring amongst other measures the destruction of the diseased tubers and haulms by burning. The remainder of the crop was in each case disposed of under the directions of the Department's officer. The further precaution was taken under the Order of prohibiting growers from planting potatoes again on the affected ground without the previous sanction of the Department.

Barley.—Investigations which have for their object the production of more prolific or otherwise more valuable varieties of cereals than those at present in cultivation have been in operation for some years past. In these experi-

PLANT-BREEDING
ADVISORY
DIVISION.

ments two lines of investigation have been followed, viz., selection and hybridisation. By selection, one good line of Archer barley has already been isolated, tested, and propagated extensively in all the barley growing districts. Within the last four years a second line of Archer has been isolated and tested in the cereal cage at Ballinacurra, county Cork. The results obtained there were such as to justify further tests on a larger scale, and these were conducted in three counties in 1912 and in two counties in 1913. A new hybrid barley named Plumage-Archer 145 raised by Mr. E. S. Beaven at Warminster was tested at all centres in both years along with the two Archers.

After the isolation and testing of new strains or lines of cereals the next point to engage attention is their propagation in sufficient quantities to distribute to farmers in different parts of the country, where they may be still further increased in bulk and eventually find their way into commercial circulation. The new lines when once proved valuable are propagated from single ears in the Glasnevin cereal cage, the produce of single ears is next increased in bulk in garden plots at Ballinacurra, and again in field plots at the same place.

This year there were sixteen garden and nine field plots of barley, the latter occupying eleven acres. The produce of similar field plots in 1912 was distributed to farmers in various counties in 1913 and occupied 88 acres. The whole of the produce of these extension plots will be either purchased by local maltsters and distributed by them as seed or distributed for this purpose by the growers themselves.

The operations of the Department do not extend beyond

superintending the general cultivation of the extension plots; at this stage persons more directly interested in the distribution of seed in their respective neighbourhoods take an active interest, and it has become a practice with some maltsters to select the best lots of seed obtained from the produce of the extension plots for utilisation as seed in the following year. Thus, in the short space of two years from the time the selected seed is sent to an extension plot of ten acres, sufficient seed is raised to sow more than one thousand acres.

The second line of improvement followed is that of hybridisation. Experiments of this nature were commenced in 1908, in which year a cross was made between Archer and Goldthorpe. Selections from the second generation of this hybrid were made in 1910 and sufficient produce of several new forms fixed for the most prominent characters has now been raised to sow field plots in 1914. Quantitative tests will also be made with new varieties in the Ballinacurra cage in 1914. A cross was made between Archer and Spratt in 1909, and between Goldthorpe and Spratt in 1912. A number of selections were made from the produce of the former and grown in garden plots in 1913. The most promising of these will be further cultivated in 1914.

Wheat.—The selection work with this cereal is similar to that detailed under barley, excepting that the variety experiments have not been continued long enough to determine which variety or varieties is the most generally suitable to Irish conditions. Field tests were conducted in two counties in 1913 with the four following varieties:—

Red Fife,
Red Chaff White,
Burgoyne's Fife,
Queen Wilhelmina.

The seed of the first two of these wheats was the produce of single ear cultures raised by the Department; Burgoyne's Fife is a hybrid raised by Prof. Biffen at Cambridge, and Queen Wilhelmina is a wheat of Dutch origin. Field plots at Ballinacurra occupied 3 acres and extension plots of Red Fife and Red Chaff White, sown in two counties, 5½ acres.

Oats.—Extensive selection experiments have been conducted with oats, and sufficient seed has now been raised with which to sow field plots in several counties in 1914. Field plots at Ballinacurra in 1913 occupied 2 acres and extension plots in the country 19 acres. Hybridising experiments between selected varieties were commenced in 1913, and the hybrid grains will be sown at Glasnevin in 1914.

Clovers.—Selections of red, white, and alsike clovers were grown in Glasnevin cage in 1913. The seeds obtained from each selection will be sown in 1914, and further selections of the most promising plots made in future seasons.

Flax.—Selection experiments in connection with flax have been in operation for three years, and have for their objects the isolation of pure lines showing (1) high quality of fibre and (2) high productivity of seed. Sufficient seed from single plants has now been raised to carry out quantitative tests on a small scale in 1914.

The work of the division is concerned with non-scheduled diseases of animals and poultry, and aims at spreading a knowledge of the preventives, remedies, and methods of treatment of a number of such diseases which at present cause loss to farmers in Ireland.

During the past year the division paid special attention to the following :—

(a) Investigating and prescribing for a disease in lambs, which is stated to recur annually in county Donegal, and to cause serious loss. The nature of the disease has been found to be that of a pyæmia, and there is every reason to believe that the seat of infection is the umbilicus. Preventive measures were adopted with very promising results, but the experiments could not be completed in one season, so that a final report cannot issue before the close of next year's lambing season.

(b) Reporting upon certain diseases in poultry which were found to cause loss in many districts throughout Ireland. Very satisfactory progress was made in finding prophylactic and therapeutic agents. The application of scientific treatment for the prevention and cure of poultry diseases has received attention to an extent not previously attained in the British Isles. In connection therewith an advanced course of instruction was given to the poultry instructors throughout Ireland assembled for that purpose at the Munster Institute, Cork, during which course the results of the work done by the division were communicated as far as possible.

Among the diseases which formed the subject of technical and advisory work done by the division were :—

- (1) Braxy in sheep.
- (2) Louping ill in sheep.
- (3) Gloumisms in sheep.
- (4) Sterility in cattle.
- (5) Contagious abortion in cattle.
- (6) White scour in calves.
- (7) Scour in cattle aged from 6 to 24 months, in most cases attributable to animal parasites.
- (8) "Wasting" in cattle, including Johnes' disease.
- (9) Red water in cattle.

A considerable amount of advisory work was done in conjunction with the operations of the Department's scheme of veterinary dispensaries in the congested districts.

Perhaps the most important work of the division is concerned with advising farmers and the instructors and other officers of the Department in reply to queries respecting the application of the most modern methods of treating diseases of animals.

The division carried out a very large number of post-mortem examinations of morbid specimens sent up from all parts of Ireland.

The following is a list of analyses made from 1st October, to 30th September, 1913:—

**CHEMICAL ADVISORY
DIVISION.**

	Number of samples.		Number of samples.
Fertilizers,	200	Peat,	1
Feeding stuffs, . . .	292	Creamery sludge, . .	1
Spraying materials, .	136	Barleys,	250
Milks, approximately	2,000	Sewage effluent, . .	17
Butters, for adulteration,	90	Water,	1
" for water only, .	400	Proprietary articles, .	4
Soils,	60	Viscera of cow, . .	1
Limestones,	30	Crop of duck, . . .	1
Sand,	6	Crop of hens, . . .	2
Sugar beet,	74	Castor oil,	1
Ensilage,	2	Eggs—(1) discolouration	
Treacle,	2	of white (2) preserva-	
Oats, 13; Oat husk, 13;		tives,	2
Oat kernel, 13, . .	39	Copper ores,	12
Cheese,	1	Sugar mangels, . . .	1
Butter preservatives, .	13	Cattle artichokes, . .	1
Tobacco and products, .	11		

Much time was spent in preparing large quantities of the "insoluble" phosphates in basic slag for field experiments, as well as the usual quantities of other fertilisers for pot and field experiments. The preparation of smears and washes for warble experiments and of emulsions for calf feeding experiments also received attention. Special analyses were carried out in connection with the cereal experiments of the Department. Different brands of prepared potato spraying mixtures were also analysed for the purposes of experiments being carried out at Athenry.

Arrangements are being made during the coming year for the resumption of these experiments on a more extended and systematic scale, than was hitherto possible.

**WARBLE FLY
EXPERIMENTS.**

Of the six apprentices who had taken out the first year's course at the Department's woods at Dundrum, co. Tipperary, in 1911-12, five were transferred to Avondale forestry station to

FORESTRY.

follow the second year's course during the session 1912-13. An examination for new apprentices was held in September, 1912 (see prospectus printed at page [46] of the Appendices), and six candidates were selected for training and followed the

first year's course at Dundrum. The total number of forestry apprentices in training during the year was thirteen.

The usual work of cleaning and filling up blanks was carried out in the Avondale forest plots during the year, and 80,000 trees were raised in the nursery and distributed to other centres under the Department. Ten acres of scrub in Ballyteague Wood, and twelve acres at Ballyfad, were cleared and re-planted with larch, pine, Douglas fir, and beech.

The following table gives particulars of the lands acquired by the Department under the Land Purchase Acts for forestry by means of the Parliamentary vote of £6,000 :—

Centre.	Area.		
	A.	R.	FED.
Dundrum, co. Tipperary,	1,196	2	28
Camolin, co. Wexford,	646	1	25
Aghrane, co. Galway,	1,277	0	36
Bailieborough, co. Cavan,	404	3	6
Ballykelly, co. Londonderry,	253	2	16
Knockmany, co. Tyrone,	467	0	9
Woodford, co. Galway,	433	0	31
Kilrush, co. Clare,	*406	0	11
Castlecaldwell, co. Fermanagh,	302	3	38
	5,387	3	34

* The Department have received possession to date of only 386a 1r. 23 per. at this centre.

During the season of 1912-13 planting operations were carried out as follows : about 57 acres at Kilrush, 83 acres at Camolin, 28 acres at Dundrum, 20 acres at Aghrane, 16 acres at Bailieboro', 16 acres at Ballykelly, and 10 acres at Knockmany.

Auction sales of felled timber were held at Bailieborough and Knockmany and a quantity of brushwood was sold at Ballykelly. About 770 tons of sawn timber were sold from the sawmill at Dundrum. This figure, however, represents only six months' working, as the sawmill staff were engaged during the remainder of the year in the erection of a new sawmill at Aghrane. The latter mill is now working and it is expected that it will meet a heavy local demand for sawn timber.

In connection with the advance of £25,000 from the Development Fund for the purchase of land suitable for afforestation,

the Department have acquired possession of the following areas:—

	Approximate Acreage.
Ballyhoura Hills, co. Cork,	1,450
Glendalough, co. Wicklow, §	2,150
Slieve Bloom, Queen's co.	3,140

Baunreagh forestry centre, which was originally acquired under the Land Purchase Acts by means of the Parliamentary vote of £8,000 per annum, has been included in the Slieve Bloom area, and the annuity payable to the Irish Land Commission has been redeemed by means of an advance from the Development Fund.

Negotiations for the purchase of an area of 1,240 acres in the Ballyhoura Hills, adjoining the area already acquired, are now practically complete, and the Department also expect to take possession at an early date of an area comprising about 600 acres near Aughrim, county Wicklow, which is intended to form the nucleus of an afforestation area.

Plans for the working of the areas acquired, with estimates of the money required therefor, have been submitted to the Development Commissioners, and preliminary operations, consisting of fencing, draining, etc., will shortly commence.

In cases where county councils are willing to acquire small woodlands under the Land Purchase Acts the Development Commissioners have stated that they will be prepared to consider applications for annual advances towards meeting the cost of maintenance and management of such woodlands. The woodlands must not be less than fifty acres in extent. The Department have directed the attention of county councils to the matter, but they are not yet in a position to say to what extent the councils will avail themselves of the Development Commissioners' offer. So far only one council has taken definite steps to obtain an advance from the Development Fund.

The services of the Department's forestry expert were utilised during the year by private persons and public bodies desiring advice on forestry matters. Trained working foresters were available for engagement by persons conducting extensive planting operations. Advice on forestry matters was supplied by letter in a large number of cases.

During the year one hundred and twenty-two applications were received for the consent of the Department, pursuant to

Section 32 (1), (b) and (2) of the Irish Land Act, 1909, to the felling of trees on holdings. Twenty cases were also dealt with which had not been fully investigated at the close of the previous year. In ninety-one cases consents were issued. One applicant who had felled trees without having received the Department's consent was warned of the penalties to which he was liable. In fourteen cases the provisions of the Act did not apply. The remaining 86 cases had not been settled at the close of the year.

Under the arrangement made with the Inspector-General, Royal Irish Constabulary, numerous reports were received from the police during the year of cases in which tree felling was observed on holdings purchased under the Land Acts. The issue of a notice warning holders of the penalty provided by the Act proved, as a rule, a sufficient check on unauthorised felling. In one instance, however, in which a large area of plantation was affected, the holder was prosecuted and was convicted and fined.

In counties Kildare and Westmeath schemes for the purchase and preservation of small local woods continue in operation. In counties Donegal, Kildare, and Mayo, the county committees of agriculture have adopted special schemes under which trees are supplied for planting shelter belts on agricultural holdings. The Donegal county committee continues to employ a trained forester on this work. The number of trees distributed and the number of holders supplied during the season 1912-13 in each of the three counties are as follows :—

Donegal, 938 holders, 183,533 trees ; Kildare, 5 holders, 7,862 trees ; Mayo, 20 holders, 18,750 trees.

(1) *Credit Societies*.—During the year ended 30th September, 1913, loans amounting to £150 were made to two agricultural credit societies which had obtained similar advances in previous years. From 1900 to 30th September, 1913, a total of £18,442 had been issued to 170 societies, and of this sum £6,758 was outstanding on the latter date.

(2) *Bulls*.—The following table shows the number of loans for the purchase of bulls granted in each of the past five years :—

Year.						No. of loans.
1909	..	..	..	..	..	174
1910	..	..	..	..	..	209
1911	..	..	..	..	..	218
1912	..	..	..	..	..	208
1913	..	..	..	..	..	222

The total amount granted in loans in 1913 amounted to £5,918.

The following table shows by breeds how the bulls sold under the loan scheme in 1913 were distributed:—

County	Short-horn	Aberdeen Angus	Hereford	Galloway	Registered Dairy	Total
Antislun, . . .	—	—	—	1	—	1
Armagh, . . .	1	—	—	—	—	1
Carlow, . . .	3	—	—	—	—	3
Cavan, . . .	5	2	2	—	—	9
Clare, . . .	3	4	—	—	2	9
Cork, . . .	21	3	—	—	2	26
Donegal, . . .	10	5	—	1	—	16
Down, . . .	—	—	—	—	—	—
Dublin, . . .	—	—	—	—	—	—
Fermanagh, . . .	3	1	—	—	—	4
Galway, . . .	5	4	3	—	1	13
Kerry, . . .	10	5	—	—	—	15
Kildare, . . .	1	1	—	—	—	2
Kilkeenny, . . .	5	—	—	—	1	6
King's, . . .	1	1	—	—	—	2
Leitrim, . . .	2	3	—	—	—	5
Limerick, . . .	5	2	—	—	4	11
Londonderry, . . .	—	—	—	—	—	—
Longford, . . .	3	—	2	—	—	5
Louth, . . .	—	—	—	—	—	—
Mayo, . . .	6	11	2	2	—	21
Meath, . . .	1	—	—	—	—	1
Monaghan, . . .	3	—	—	—	1	4
Queen's, . . .	3	—	—	—	—	3
Roscommon, . . .	5	3	3	—	1	12
Sligo, . . .	4	9	2	—	—	15
Tipperary (N.R.), . . .	4	1	3	—	1	9
(S.R.) . . .	3	—	—	—	4	7
Tyrone, . . .	—	—	—	—	1	1
Waterford, . . .	3	—	—	—	—	3
Westmeath, . . .	—	2	2	—	—	4
Wexford, . . .	8	—	—	—	—	8
Wicklow, . . .	1	5	—	—	—	6
Totals, . . .	119	62	19	4	18	222

(3) *Stallions*.—Particulars of the assistance given by the Department by means of loans and subsidies for the purchase of stallions during the past five years are set out in the following table:—

Year	Thoroughbred		Irish Draught		Half-bred		Glydesdale		Shire		Total	
	Loans	Subsidies	Loans	Subsidies	Loans	Subsidies	Loans	Subsidies	Loans	Subsidies	Loans	Subsidies
1909, . . .	15	9	—	—	14	7	2	1	—	—	31	17
1910, . . .	8	5	—	—	16	16	1	—	1	—	26	21
1911, . . .	20	15	1	—	10	10	3	1	—	—	34	26
1912, . . .	10	10	—	—	8	8	4	4	—	—	22	22
1913, . . .	10	7	—	—	9	6	6	5	—	—	25	18

The total amount granted in loans in 1913 was £2,335, and in subsidies (which are given in reduction of the price of stallions), £2,233.

(4) *Agricultural Implements, etc.*—The number of loans granted in 1913 was 394, as compared with 64 in the previous year, the amounts advanced being respectively £1,629 and £998.

The following table gives particulars of the machines bought under the scheme:—

	Number.
Mowers,	197
Binders,	21
Threshers (power driven),	6
Threshers (horse gear),	71
Thresher (hand power),	1
Winnowers,	18
Petrol Engines,	1
Hand Separators,	30
Horse Sprayers,	16
Hay Rick Shifters,	18
Swath Turners and Hay Tedders,	12
Wheel Rakes,	12
Potato Diggers,	10
Drills,	3
Thistle Cutters,	2
Ploughs,	3
Manure Distributors,	1
Miscellaneous (small),	4
Total,	426

In many cases two or more implements were included in a single loan.

In Louth and Mayo, the county committee of agriculture purchased three and twenty-four knapsack sprayers respectively for hire to small farmers and others at a small daily charge. The cost of the machines was defrayed out of the joint fund at the disposal of the committees.

(5) *Fencing*.—During the year 231 applications were received as compared with 155 in the twelve months ended 30th September, 1912.

Particulars as to the number of applications received, loans granted, etc., up to 30th September, 1913, are as follows:—

Year ended 30th Sept.	No. of applications	No. of applications withdrawn	No. of applications under consideration on 30-9-13	No. of Loans granted	Amount of Loans granted
1907-1910,	267	26	1	219	£3,946
1911,	101	4	—	80	£1,277
1912,	155	10	2	125	£2,304
1913,	231	24	88	173	£2,638
Total,	754	64	91	599	£10,165

(6) *Meal Mills, etc.*.—A loan of £24 referred to in last year's report, was issued under the scheme this year, and one of £450 has been conditionally granted.

(7) *Village Halls*.—One loan was granted under this scheme, but only an instalment had been advanced on 30th September, 1913. Correspondence was proceeding on that date with regard to two cases in which loans of £100 and £300 had been provisionally granted.

(8) *Fruit Trees*.—Loans amounting to £421 were issued during the year. In three cases the loans were granted to individual farmers; and in four, to associations of fruit growers. In these latter cases the total number of persons participating in the loans was 22.

One loan provisionally granted during the year had not been advanced on the 30th September, 1913, owing to delay on the part of applicants in complying with the provisions of the scheme.

(9) *Hay Barns*.—This scheme was put in operation for the first time in the autumn of this year. Its object is to provide small farmers with facilities for procuring hay barns of a smaller size than those for which the Board of Works grant loans.

Nine loans amounting to £264 were granted.

(10) *Scutch Mills*.—Two loans amounting to £250 were issued, one for the extension of a scutch mill and the other for the purchase and installation of machinery.

Copies of the several loan schemes will be found printed in the Appendices, see pages [66], [67], [101] to [105], [110], [112].

2.—TECHNICAL INSTRUCTION.

This section of the Report covers the academic year, 1st August, 1912, to 31st July 1913.

The various schemes under the administration of the Technical Instruction Branch continue to make satisfactory progress. In the earlier years of the Department's existence a preponderating amount of its energies were directed to the organisation of a scheme of instruction in Experimental Science, Drawing, Manual Instruction, and Domestic Economy for Day Secondary Schools. The establishment of this scheme, which is now in general operation, and has yielded the most gratifying results, was regarded as a condition precedent to the organisation of a system of technical education which must be founded on the principles of science and art which constitute the basis of such a course. This being successfully accomplished, efforts are now being concentrated on the rapidly developing system of Technical Education.

The intentions of the Department in instituting a "Course" system in Irish Technical Schools and basing their assessment of the "Science and Art Grant" on the

SCHEMES UNDER LOCAL AUTHORITIES.	satisfactory maintenance of approved Courses, have been realised. The Technical Instruction Committees of the Urban
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Centres (and the system was only intended to apply to such centres) have co-operated with the Department, and are each year seeking to frame courses suited to the needs of their localities. For rural districts and smaller centres not in a position to maintain such courses of instruction in associated subjects, the Department introduced a scheme of payments at a lower rate, for single subjects, at the same time reducing the requirements and adapting the regulations to the conditions existing in rural areas. The Technical Schools are, with very few exceptions, well attended in Ireland, and year by year the work they are doing is improving in character. Local authorities have, therefore, felt justified in providing permanent buildings. Since the last Annual Report buildings have been provided in Navan, Rathmines, Magherafelt, and Tralee, and are either available for occupation at present or will be very shortly. Extensions to existing schools have been found necessary in Ballymena, Carrickfergus, Clonmel, and Coleraine, while other centres are making provision for improved accommodation.

Schemes of Technical Instruction are in operation in all the counties and in 91 of the 96 Urban Districts throughout the country. The only Urban District of considerable importance without a scheme is that of Lisburn. Its nearness to Belfast is a partial, though not a satisfactory or sufficient, explanation of the fact, and the industrial population of Lisburn have

suffered serious disability on account of it. The other four Urban Districts without schemes, viz., Belturbet, Keady, Killiney and Ballybrack, and Tandragee, are very small.

These Schemes of Technical Instruction have, during the past session, had enrolled as students no fewer than 45,341 persons, and this number will not, it is anticipated, be largely increased under existing conditions. The aim, then, is to provide this number of students with the best form of Technical Education possible—a problem of no mean order. The work falls naturally into two great divisions: (a) the work of Technical Schools, and (b) "Itinerant" and other modes of instruction in rural areas.

All these schools now provide courses of instruction designed to suit local needs. The tendency has probably been to attempt too many different courses, but, if so, the error will remedy itself. Committees generally are urged to concentrate their efforts on one or two carefully thought-out courses.

Reference was made in last year's Report to the establishment of a System of Examinations by the Department to meet the needs of Irish Technical Schools. The first series of Examinations was held between the 2nd and 17th of May last, about 2,000 individual students presenting themselves for examination. Candidates were permitted to present themselves for both the First and Second Year Examinations, but credit was not given for the Second Year Examinations unless the candidate completed the First Year Examinations. 3,230 papers were worked in the First Year Examinations, with 62·5 per cent. of passes. 1,018 papers were worked in the Second Year Examinations, of which 301 were cancelled because the candidates failed to complete their First Year Examinations. Of the remaining 717 papers worked, 77·1 per cent. secured passes. It should be added that, though attendance at these examinations is voluntary, and though the results do not in any degree affect the grants paid to schools, it has already become abundantly clear that they will exercise a profound and beneficent influence on the Course System in our Technical Schools.

Among the many lines of progress there are two which have received attention already, and will receive greater attention. The first is the cultivation of a closer and more vital relationship between Technical Schools and Employers of Labour. The existence of a sound system of Technical Education is a matter of vital importance to our trade and commerce. Employers must be induced to take a closer interest in the efforts of our Technical Schools to train their workers. The schools themselves will benefit from the advice of employers. Already, thanks largely to the Department's Scheme of Apprenticeship Scholarships, and to the Day Trades Preparatory

Schools, progress has been made in the direction of securing such a desirable *rapprochement*. The second point referred to lies in the policy of our Art Education. There is now the greatest freedom for Schools of Art to direct their aims in closer relation to industrial requirements. Speaking broadly, there are two main types of students attending our Schools of Art—there are industrial students engaged in some industry into which Art enters in one form or another, and there are students who seek a knowledge of Art for its own sake, and the kind of instruction suitable to the one is in many respects unsuitable for the other. More attention is necessary to the requirements of the students of an industrial type, and in this connexion attention may be called to the Report of the Art Inspectors contained herein.

For several years past the Department have, acting in conjunction with the National Board, arranged courses of instruction for the supplementary training of National Teachers, and also for the instruction of pupils of Elementary Schools in domestic subjects. In this connexion they have undertaken—

- (1) Summer Courses of Instruction in the Royal College of Science, the Royal Agricultural College, Glasnevin, and at Kingstown, in the subject of Rural Science and School Gardening, to enable teachers to undertake instruction in this subject in their own schools.
- (2) Sessional Courses in Rural Science and School Gardening in local centres for National Teachers. Twelve Courses were thus held during the session, and were attended by 145 teacher-students, of whom 127 were presented for examination, 98 reaching a satisfactory standard. In all 199 teachers have received provisional recognition as teachers of the subject, while 82 have been awarded the Department's Certificate of proficiency.
- (3) The inspection of this subject in National Schools where it has been approved as a subject of instruction.
- (4) Sessional Courses in Experimental Science, Domestic Economy, and Drawing for National Teachers in Technical Schools. During the session classes in Experimental Science have been held in 10 centres, in Domestic Economy in 22 centres, and in Drawing at 9 centres. At the Final Examinations 458 presented for examination, and 338 passed. The Certificates issued by the Department are recognised by the Commissioners of National Education.
- (5) Courses of Instruction in Technical Schools in Domestic Economy for pupils of National Schools. These are arranged as Centre Classes where conditions permit of their establishment without interference with the

normal work of the Committees. The expense of such courses is defrayed by a grant of 7s. 6d. per pupil, payable by the Commissioners of National Education. During the past session such classes were held in 28 centres. Reference may be made to Dr. Garrett's interesting report in this connexion.

The subjects of instruction which have been found most suitable for rural areas are (in addition to agricultural subjects), Domestic Economy including Cookery, Laundry-work, Home Sewing, House-
 TECHNICAL EDUCATION IN RURAL DISTRICTS. wifery, and Hygiene and Home Nursing; Manual Instruction in Wood (including Drawing) Lace and Crochet Making, Sprigging and Embroidery, Machine Knitting, and other forms of home industry.

The operations of the Department in this branch of its work have greatly increased, and, it is believed, serve a useful purpose. The instruction in Domestic Economy is largely done by means of itinerant teachers, though there are a number of Residential Schools of Domestic Economy, and three Higher Schools of Domestic Economy. The work of Manual Instruction is also done by itinerant teachers, and the Department have arranged to hold a further long course of instruction for the training of an additional number of teachers of this subject.

The classes in Lace and Crochet-making continue to do good work, but the industry is liable to rapid fluctuations. These industries, as well as that of Sprigging, have been largely developed under the County Schemes for Donegal and Fermanagh, both of which counties employ a large staff of teachers. In addition to the promotion of this work through the medium of County Committees the Department give encouragement by direct means. The Glove-making industry in Tipperary continues in successful operation, and the success of the Machine Embroidery School at Ballydugan (Co. Down) has justified the Department in approving of the opening of a second one in Maghera (Co. Londonderry).

Notwithstanding the progress of the work in rural districts, there is urgent need of its further vigorous development, especially in those subjects which bear directly upon home-life. The operations of land legislation creates, especially in the western counties, a need and an opportunity for a further extension of the work. The difficulties under which it is carried on, especially in the poorer districts of the West, are brought out in Mr. McGann's report. The difficulties only emphasise the necessity for a more thorough and vigorous organisation of this type of instruction by the County Technical Committees of the West of Ireland.

The following Table shows the number of students (with their occupations) attending instruction in the four Provinces :—

TABLE SHOWING THE OCCUPATIONS OF STUDENTS ATTENDING URBAN AND COUNTRY SCHOOLS AND CLASSES IN NON-AGRICULTURAL SUBJECTS.

Occupations of Students	Leinster	Monster	Ulster	Con-naught	Totals
YOUNG MEN.					
Persons engaged in Farming Occupations.	906	644	892	606	2,948
Building Trades—including Workers in Wood, &c.	342	450	414	90	1,296
Coach and Car Builders,	39	50	15	14	118
Engineers, Workers in Metal, Draughtsmen, &c.	405	252	860	10	1,527
Architects, Surveyors, Civil Engineers, &c.	29	28	65	12	134
Electrical Engineers, Scientific Instrument Makers, &c.	87	30	100	—	217
Printing Trades—Compositors, Lithographers, &c.	147	46	112	9	314
Textile Industries—Designers, Weavers, &c.	23	22	589	—	634
Painters Decorators, &c.	77	80	67	7	231
Plumbers, Gasfitters, &c.	64	59	68	4	195
Trades involving applied Art—Jewellers, Furniture Makers, &c.	60	44	71	22	197
Chemists, Analysts, Druggists, &c.	58	47	134	2	241
Salesmen, Shopkeepers, Warehousemen, &c.	382	321	646	196	1,545
Clerks in Commercial Offices.	652	393	1,042	60	2,147
Clerks in Banks, Civil Service, Law, Assurance and Accountants' Offices.	281	103	281	3	668
Teachers, Assistant Teachers, Pupil Teachers.	295	250	290	49	884
Students (University, Law, Medical).	72	40	57	22	191
Occupations not included in the above Classes.	654	439	333	137	1,563
Boys just left School or College.	173	108	84	32	397
Boys still in attendance at School or College.	595	1,078	653	159	2,485
No Occupation stated.	349	238	332	38	957
TOTAL NUMBER OF YOUNG MEN.	5,720	4,722	7,105	1,372	18,919
Corresponding Numbers for 1911-12.	5,375	4,190	7,605	1,536	18,706

OCCUPATIONS OF STUDENTS—continued.

Occupations of Students	Leinster	Munster	Ulster	Con-naught	Totals
YOUNG WOMEN.					
Persons engaged in Farming Occupations.	692	1,326	1,368	633	4,018
Domestic Servants, . . .	629	323	497	83	1,532
Printing Trades, . . .	7	—	13	—	20
Dressmakers, Milliners, &c.	261	204	516	62	1,043
Textile Industries—Designers, Weavers, &c.	113	1	597	3	714
Factory Workers not included in above.	88	28	560	7	683
Workers in Lace, Crochet, Embroidery, Sprigging, Drawn Thread Work, &c.	41	624	1,009	209	1,774
Saleswomen, Shopkeepers, &c.	400	562	442	95	1,499
Clerks, Cashiers, Civil Servants, &c.	389	176	736	50	1,345
Teachers, Assistant Teachers, Pupil Teachers.	452	505	1,042	154	2,153
Students (University, Medical)	51	14	69	3	137
Occupations not included in above Classes.	654	506	733	634	2,327
Girls just left School or College.	159	254	269	15	697
Girls still in attendance at School or College.	508	717	589	416	2,430
No Occupation stated, . . .	1,707	1,305	2,493	553	6,060
TOTAL NUMBER OF YOUNG WOMEN.	6,151	6,438	11,023	2,810	26,422
Corresponding Numbers for 1911-12.	6,446	6,766	10,859	2,729	26,795
TOTAL NUMBER OF STUDENTS.	11,871	11,160	18,128	4,182	45,341
Corresponding Numbers for 1911-12.	11,819	10,954	18,464	4,266	45,502

Reference has already been made to the working of the Department's Programme in Day Secondary Schools, and fuller particulars will be found in the Inspectors' Reports which follow, and in the Appendices. The Syllabuses undergo revision from time to time, as a result of experience. The revision of the Syllabus in Chemistry has proved satisfactory. The Syllabus for Physiology and Hygiene also calls for revision, as it is found that in some cases the instruction given under it tends to become "academic" and to fall out of relation to the needs of those under instruction. The revision of this Syllabus has, therefore, been undertaken.

The following Table shows the growth and present position of this Programme in the Secondary Schools:—

Province and Year.	No. of Schools.	No. of Pupils who worked through the Courses, and upon account of whom grants were payable.					Amount of Grants Earned.
		Preliminary Course, 1st Year.	Preliminary Course, 2nd Year.	Special Course, 3rd Year.	Special Course, 4th Year.	Totals (Individual Pupils).	
LEINSTER.							
1901-2, .	64	2,732	—	—	—	2,732	£ s. d. 3,932 3 11
1904-5, .	103	2,128	1,363	448	119	4,078	7,530 19 0
1907-8, .	111	2,406	1,721	799	248	5,136	9,951 2 9
1910-11, .	108	2,541	1,661	1,077	235	5,411	10,575 16 7
1912-13, .	103	2,457	1,742	1,036	268	5,483	10,854 17 0
MUNSTER.							
1901-2, .	39	2,008	—	—	—	2,008	2,943 9 4
1904-5, .	70	1,507	867	384	52	2,810	5,350 7 1
1907-8, .	83	1,906	1,285	619	128	3,924	7,286 14 11
1910-11, .	82	1,794	1,194	711	149	3,821	7,186 0 8
1912-13, .	78	1,652	1,213	660	146	3,652	7,163 12 1
ULSTER.							
1901-2, .	42	1,596	—	—	—	1,596	2,431 7 0
1904-5, .	68	1,184	735	315	81	2,315	5,316 8 8
1907-8, .	77	1,530	1,103	491	119	3,211	7,676 19 0
1910-11, .	79	1,478	1,191	559	140	3,362	8,406 18 4
1912-13, .	76	1,497	1,290	641	127	3,545	8,839 19 10
CONNAUGHT.							
1901-2, .	7	189	—	—	—	189	268 10 5
1904-5, .	15	272	201	100	15	588	1,219 8 11
1907-8, .	19	382	276	150	38	844	1,810 8 6
1910-11, .	16	360	243	142	30	773	1,786 8 5
1912-13, .	18	377	211	107	24	776	1,717 8 11
TOTALS.							
1901-2, .	154	6,615	—	—	—	6,615	9,575 10 8
1904-5, .	266	5,691	3,166	1,267	267	9,791	19,417 3 8
1907-8, .	289	5,213	4,385	2,939	531	13,115	26,726 5 2
1910-11, .	283	6,171	4,289	2,499	554	13,367	27,983 4 0
1912-13, .	275	5,983	4,456	2,594	555	13,456	28,575 17 10

Mrs. W. VICKERS DIXON, *Senior Inspector*, reports:—

SECONDARY SCHOOLS.

The number of Secondary Schools working in connection with the Department in Experimental Science, Drawing and Domestic Economy was practically the same as in the previous session, and, generally, they have maintained a very satisfactory standard in these subjects.

It is unfortunate that the First Year's or Preliminary course is so frequently put into the hands of young and inexperienced teachers. This course in which the fundamentals of the scientific method must be laid, undoubtedly calls for as much thought and care on the part of the teacher as the more advanced courses, and on its treatment depends the pupil's outlook on, and success in these courses. Weakness and inaccuracy in the arithmetic of the pupils is still one of the greatest difficulties teachers of this course have to contend with, and some feeling probably that, till the pupils can measure and make the necessary calculations accurately, it is useless advancing delay unduly over the first sections of the syllabus. So much is this the case that it is too common to find classes in which one-third of the session has been spent upon merely mensuration exercises. It is suggested that by pushing on to the subsequent sections of the Syllabus, designing the exercises on them to give the necessary practice in measuring and calculating, the pupils' interest would be more easily aroused and maintained, while progress would be more rapid and quite as sound as under the former method, especially if the work in the ordinary classes in Mathematics be co-ordinated with the Science classes, which work should bring the pupils up to the standard of Mathematics required in the Science classes long before the end of the session. Note taking or the writing of records of what is done in the Laboratory is another difficulty. In this course the pupils are called on for the first time to write out an accurate description of what they have done and seen and also to state the conclusions they have drawn from their observations. The training that this gives to the pupils is of inestimable value. This part of the work is better done than formerly, and one seldom finds dictated notes or descriptions of experiments in the pupils' books; but the production of a clean note book is regarded too frequently as an end in itself. Much time is often spent upon writing useless descriptions in a stereotyped form and on needless transcription that would be better employed in discussing the work with the class that they may recognise the fundamentals of the experiments, assisting them to draw legitimate conclusions from their observations and to express these in their own words.

The revision of the Syllabuses in Chemistry and the issue of the teaching notes upon them has, as was hoped, resulted in a more systematic treatment of this subject, especially in the special courses. Generally the subject has been well taught and many schools have gained the excellent award for this subject. In the Introductory classes there is still a tendency to pass in a superficial manner over the first sections of the Syllabus, which, *inter alia*, is designed to give a general grounding in the commoner processes and methods employed in the laboratory and the reasons for their employment, so that subsequently much direction and individual attention has to be given to enable pupils to carry out simple investigations, at a time when they should reasonably be expected to attempt such problems unaided.

It is strange, that, compared with the number of Schools taking Chemistry the number taking Physics is so small, especially as a knowledge of the latter subject would appear to be of more immediate interest and utility to the majority of pupils. In Leinster approximately six schools take Chemistry for one taking Physics, in Munster four take Chemistry for one taking Physics, in Ulster the numbers are nearly one and one half to one, and in Connaught they are practically equal. The work in this subject is generally satisfactory; in few schools does it merit the excellent award or fall

below the general average. The general weakness is in failing to bring home to the pupils the somewhat difficult conception of energy. This is due to insufficient discussion of the work done in the laboratory—apparently teachers consider Physics an easier subject to teach than Chemistry and allow the minimum time for it with the result that they can during the session only cover the syllabus in a hurried manner.

The number of schools taking Mechanics is still small. Probably, the reasons there has been no decided increase in this number lately are (i) the inclusion of a larger amount of mechanics in the special course in Physics, when the syllabus of this subject was revised some years ago—and which amount the schools regard as sufficient for most pupils, and (ii) the fact that Mechanics is still regarded by many as a very mathematical subject that would not be interesting to the pupils. The experience of the schools taking this subject shows these last suppositions to be ill-founded. The mathematics required is not beyond the ordinary pupil and the subject appeals to the interest of all. Generally the work done in this subject is decidedly good.

There has been an increase in the number of schools taking Physical and Commercial Geography, included two years ago among the courses in Experimental Science; but as yet the subject has not attracted as many schools as was anticipated. Where the subject has been taken up it has been treated very unequally. This is no doubt due to the newness of the subject, to the different situation of the schools and their surroundings and to the previous training of the teachers. In some schools the section on Surveying is well done, in others that on the geological formation or configuration and products of the surrounding district, on the disposition of towns, or on Meteorology and Climate, etc., receive more attention; but generally the last mentioned section is indifferently treated owing to the pupils' weakness in physics. Well balanced courses in which the different sections of the syllabus are adequately treated, how these different factors are dependent upon each other, and finally how they determine the resultant configuration of the land and its products, are few. However, as the teachers, who are all ready to adopt suggestions, gain experience and realize the possibilities of the course, considerable improvement may be expected.

In Physiology and Hygiene the teaching is careful; but proceeds along somewhat academic lines, and is scarcely in touch with the requirements of the majority of the pupils.

Botany though an eminently suitable subject for girls is comparatively neglected. On the whole it is well taught, and in a few schools which have gardens an attempt is made to link it up with Horticulture, but the efforts in this direction are small. In some schools botanical excursions form a special feature of the work from which much useful and interesting knowledge is derived; but the situation of the schools and the serious demand these excursions make upon the school time table prevents their occurring as frequently as is desirable.

There is some improvement in the maintenance of the laboratories; but there is still much room for improvement in the storing and keeping of chemicals and apparatus. The former are too often seen in unlabelled bottles, in tin canisters or in paper bags, and, outside the convents, clean glass is seen in few schools.

It is surprising that so few schools have realized the value of a laboratory assistant. In the larger schools the annual loss caused by the neglect of apparatus must be more than the wages of a good assistant.

The schools are now recognising the fact that Drawing cannot be taught efficiently in classrooms furnished with the old fashioned long desks and benches and without any special equipment, and are slowly, but steadily, providing better accommodation and equipment for teaching this subject. The steady progress noted in last year's report continues, as also the prevailing weakness in Geometry and Geometrical Drawing. As this subject is fully reported upon by the Art Inspectors further reference to it is unnecessary.

Domestic Economy still continues to make headway. Each year sees a few more schools added to the number taking this useful subject, improvement in the teaching and a broader treatment of the subject. The number of pupils demanding this instruction has increased so much of late that schools have been compelled to provide larger kitchens and workrooms and better equipment. There is also a growing demand for a more thorough training in general household duties than can be given in the ordinary secondary school, and there are now in the country 4 Higher Schools of Domestic Economy and 7 Residential Schools of a lower grade in which a year's training is given in this subject. The numbers in attendance at these schools is slowly but steadily increasing.

DAY TRADES PREPARATORY SCHOOLS.

Where these schools have been established their position and function in the educational scheme for the district is becoming more fully recognised. While there has been no material increase in the attendance, the sound practical training they give appeals strongly to employers who are daily giving increased support to the schools.

Twelve of these schools are now in operation, and two others will be opened next session in Dundalk and Trades.

As the numbers attending these schools increase it is hoped that it may be possible to give instruction bearing more directly on special trades. At present the numbers do not warrant dividing the schools into sections, and all pupils receive the same instruction, that which has been judged the most generally useful for all trades—though perhaps it has been given a bias in the direction of Engineering, this being the trade to which the majority of the pupils are shaping their careers.

It is satisfactory to note the increasing *esprit de corps* of these schools and to report that the methodical habits, love for knowledge and desire for improvement they inculcate are lasting. This is evidenced by the fact that the pupils, when they have left the Day Trades Preparatory Schools and have gone to work, are to be found attending the Evening Classes in Technical Schools—in which they are the most satisfactory pupils.

TECHNICAL INSTRUCTION UNDER LOCAL AUTHORITIES.

There were practically no important changes in the schemes already in operation, and which on the whole have been working satisfactorily.

Except in Cork and Armagh, in which the new buildings were utilized for the classes, there was no marked increase in the numbers attending the County Borough or Urban Technical Schools. Indeed, in most of these centres the numbers attending evening classes have now nearly reached what may, under the existing educational legislation, be regarded as the normal figures. Further increase in the attendance is to be secured by retaining the pupils for a longer period at the schools.

In the County Boroughs the chief work must now be in consolidating and perfecting the work already undertaken. Belfast is in this respect considerably in advance of the other County Boroughs. Cork having completed its new school is in a position to devote its energies to working out a definite scheme of instruction for the city. Londonderry and Waterford though much smaller are proceeding carefully along right lines. Dublin and Limerick are less satisfactory. The former indeed has not as yet formulated a definite policy and much of the work of this centre at present consists of small, unrelated classes of an elementary character.

Courses of study are now in operation in all Technical Schools. In the larger schools considerable improvement has been effected in their organisation, they have been restricted within narrower and better defined limits and are generally well taught. The examinations on the "Course System" instituted by the Department and held for the first time this Session have been an important factor in effecting this improvement, and, as there are many signs that these examinations will be much more fully availed of in future, further improvement in the courses may be expected. In several

of the smaller schools too many courses, offering a large variety of subjects, have been attempted, and the results so obtained have not been altogether satisfactory. It is suggested that by devoting their energies to a smaller number of carefully considered courses offering a more limited choice of subjects, and providing a few special classes for those to whom their courses do not appeal, such schools would accomplish more useful work. While the "Course System" generally works well in fair sized schools, it cannot with advantage be universally adopted in small schools, and Committees must recognise that there are many serious pupils for whom they cannot run suitable courses or who cannot, with advantage, attend their regular courses for whom single classes would be of great value. This is especially the case of women students seeking instruction in some branch of Domestic Economy or women's work.

The majority of the larger Technical Schools are now housed in buildings fairly suitable for their immediate needs; some of them, however, foreseeing future developments are contemplating the necessary additions and improvements.

The school at Armagh was this session transferred to the Old Market Hall, which is in a more central position, and had been altered—practically rebuilt—for the purpose and now provides excellent accommodation for the classes. The new buildings for the School of Commerce and Domestic Economy in Rathfriland and the Technical School in Navan are drawing near to completion, and it is expected to open classes in them at the beginning of next Session; while it is hoped that the new buildings at Magherafelt and Trillick will be completed towards the middle of the coming session. Plans have been prepared and loans applied for in respect of buildings at Ardlow and Galway, and active steps are being taken at Drogheda and Maryborough to provide new buildings.

Other towns in which new schools are urgently needed are Athlone, Kilkenny, Omagh, and Wexford, where the accommodation at present provided for the classes is very inadequate.

There is still considerable leakage between the Introductory and the Specialized Courses. Scarcely 50 per cent. of those who join this preliminary course are found subsequently attending the more advanced classes. This loss is partly due to effortless and uninteresting teaching which fails to retain the less earnest and ambitious pupils for even one session; but the chief reason for this loss is that the course is usually attended by many young people and even day scholars who, having no occupation, have no incentive to attend any of the specialized courses and drift away from the school. A similar cause accounts for the great difference between the numbers attending the first and second year's courses in commerce. The first is attended by a large number of pupils who are not at business and have no particular reason for seeking this type of instruction and find that it has no special attraction for them, or find employment in some other walk of life and cease attending the course. This disparity of numbers of those attending the First and Second years is serious but not so pronounced in the other courses commonly taken in the schools. Sound, energetic and interesting teaching given by up to date experts, is one of, if not the greatest factor in, maintaining the regular attendance of pupils from year to year at the schools.

Of the County Schemes that for Dublin showed the most marked advance. This year it provided for elementary instruction in Commercial and Building Trades subjects in addition to Domestic Economy, thus putting the Scheme on a par with some of the other County Schemes. Good classes in these subjects were held at the selected centres—those at Balbriggan and Sherris being remarkably successful, and it is hoped that suitable premises will be obtained in these towns which it is proposed shall be made permanent centres for such instruction.

The schemes in charge of whole time officers of the Technical Instruction Committees are generally working well and are satisfactorily administered. This is particularly so where these officers are also organising teachers.

The amount of work under a County Scheme is now so great, and it is so extended, that the entire services of a capable officer are indispensable if the work is to be properly organised and supervised. It is in counties in which the Schemes are in charge of part-time officers that one usually finds instruction restricted to centres which have again and again been visited by the same teachers, the worst accommodation provided for the classes, and generally the least progress.

Except in the counties in which joint urban and rural schemes are in operation the greater part of the work under county schemes consists in itinerant instruction in Domestic Economy and Woodwork. The work in the latter subject, where desirable, being extended so as to include some instruction in elementary mathematics and drawing connected with the Building Trades. This year, however, there has been a considerable extension of instruction in commercial subjects throughout the counties.

Improvement in the type of instruction given in the itinerant classes is being steadily effected. In Commercial and Building Trades subjects it is being brought more in touch with the requirements of the people and local conditions receive more consideration. The Syllabuses in Domestic Economy have been widened and now frequently include Sick-nursing and First Aid to the injured: while a few Committees have rented cottages in which fuller courses in general housewifery are given. This useful form of instruction it is hoped will be considerably extended.

Except in Counties Donegal and Fermanagh there has been no serious effort to bring rural industries under the influence of county schemes. In these two counties classes in Lace and Sprigging industries are well organised and supervised, and advised from time to time of the prevailing and best marketable fashions, all of which is of great benefit to the industries.

Special points of interest connected with the different Schemes are noted by the District Inspectors in their reports.

MR. TURNBULL, Inspector for the Southern District, reports:—

COUNTY AND URBAN SCHEMES.

The Southern District includes the whole of Munster except Co. Clare, and the Technical Instruction Schemes are administered by the following Committees:—(I.) The County Boroughs of Cork, Limerick and Waterford; (II.) Clonmel, Queenstown and Tralee; (III.) Tipperary (Joint Urban and Rural); (IV.) Counties Cork, Kerry, Limerick, Tipperary (N.R.), Tipperary (S.R.), and Waterford. Limerick is the only County Scheme that does not include an urban centre: all the other counties carry out their Schemes in Urban and Rural centres, and a saving in organisation and finance is thereby effected. In Co. Cork there are 16 sub-schemes for permanent centres, and 8 of these are in Urban Districts.

The position of Urban Centres may be considered as follows:—(a) Urban Schemes administered by independent Urban Committees; these are Clonmel, Queenstown, and Tralee. (b) The Scheme of an Urban and Rural District conjointly, the only example being Tipperary (Joint Urban and Rural). The main part of the work is carried on in Tipperary, and short courses in Manual Instruction and Domestic Economy are given in the surrounding Rural District. (c) Urban Schemes which are included in the larger County Schemes, and administered by County Committees with representative members from the Urban Districts. There are 18 of these sub-schemes included in County Schemes, to the mutual advantage of both Urban and Rural Districts.

The plan adopted under (b) and (c) is to employ a general staff of teachers, who give instruction, each at two or three permanent centres during the long Winter Session, and there are about a dozen such centres in the smaller towns in addition to the 18 Urbans. Some of the instructors may also during this period conduct short Itinerant Courses at rural centres which are within a reasonable distance of their permanent centres. The permanent work is stopped at the end of April, or even earlier in some cases,

and then the instructors during May, June and July conduct short Itinerant Courses, each consisting of 30 lessons or so, at Rural centres exclusively. In the case of Domestic Economy, however, the majority of the Instructors give only short courses alike at Urban and Rural centres, with occasionally an extension for a double period when there is an exceptional demand for instruction. In the past this method of distributing the time of the instructors has been found to work well, except in the month of July, when possible rural students are busily engaged in the fields, and the attendance at classes falls considerably.

The Schemes in the Urban Districts included instruction under the provisions of the Course System as well as under the conditions of the recently introduced system known as Section II. (b) of the Department's Programme, whereby individual subjects of instruction are recognised for grants at a somewhat lower scale than in the Course System. In the smaller dependent Urban and other permanent centres there was an increasing tendency to adopt the terms of Section II. (b) as being more suitable for their purposes.

The Urban Courses included Introductory, Handicraft, Domestic Economy, Commercial, Pure and Applied Science, and Art subjects, but it was only in the larger centres that all of these Courses were in operation. In too many cases in the past Introductory Courses have not been successful, except where teachers of wide experience and with a broad outlook have been put in charge. The Introductory Course is intended for backward students whose general education is not yet of a sufficiently high standard to enable them to derive adequate benefit from the Special Courses. Such students, therefore, are expected to spend at least one year in the Introductory Course, and it is the hardest work that any teacher in a Technical School can undertake if he is to succeed in capturing the interests of his students and in stimulating them to proceed afterwards to the Specialised Courses.

In Building Trades and Handicraft Courses steady progress continued to be made. In Counties Cork and Waterford the Handicraft Course was widened by the addition of instruction in Metal-work which has awakened a new interest and extended the usefulness of the Course. In Doneraile, for example, local blacksmiths have derived considerable benefit from the Course, and in Baltimore the work has had a very direct bearing on the growing Boat-building Industry of that port.

Commercial Courses were conducted in Clonmel, Queenstown, Tralee, Tipperary, and in several dependent Urban centres in Counties Cork and Tipperary (N.R.). Highly trained teachers were engaged at most of these centres, their classes were attended by suitable students, and sound business methods were inculcated. In Tipperary (N.R.), however, only one of three centres proved successful, and that was undoubtedly due to the fact that the teacher came with sound business experience, and had besides all the characteristics essential for efficient teaching.

Domestic Economy subjects were taught generally in a very sound and practical manner. Formerly they were classed as Cookery, Laundrywork, and Needlework, but during the past few years it has been found a better training for home-life to make the second subject "Housewifery" which includes all branches of House-work, except Cookery and Needlework; it takes cognisance of such duties as fall to the lot of a housekeeper, and includes cleaning, laundry-work, ventilation, sanitation, home and personal hygiene, first-aid in cases of accident and illness, and sick-nursing; and where instructors have entered upon this Course whole-heartedly, there has been no difficulty in securing and maintaining a good attendance of students. It is a very hopeful sign for the future welfare of the home that Domestic Economy continues to be one of the most successful courses in the technical schools as well as in the rural centres throughout the whole District.

Instruction in Art was continued at the three independent Urban Schools, at 10 centres in Co. Cork, 2 in Co. Kerry and 2 in Co. Waterford. At

Clonmel, Tralee, Fermoy, Midleton and Youghal there was a steady development in the direction of Applied Art in relation to surrounding trades and employments, such as printing, house-painting and decorating, wood-carving, leather-working, stained-glass working and lace-making. The Courses were arranged to suit the general requirements as well as the individual needs of the students, who attended well during the Session, because they found the instruction both interesting and helpful. At the other centres, where very little beyond formal academic training has been attempted, there was a sparse attendance, and few earnest students, beyond such young teachers as aimed at gaining certificates, were found to take any interest in the Courses.

The classes in Women's Industries included such work as Limerick Lace-making, Crochet-work, Needlework and Dressmaking, and form the subject of a separate report.

The four Residential Schools of Domestic Training maintained their reputation for good work, and as they came under the Regulations for grants (Section II. b) they have been placed on a sounder financial basis, and in future even higher results arising from better conditions of living and teaching, will be expected. Several Counties contributed scholarships tenable by young women at Carrick-on-Suir and Dumdram Residential Schools, where they obtained an efficient training in domestic duties. At the Dumanaway School all the students are now fee-paying, and this applies also to the Higher Residential School of Domestic Training at the Ursuline Convent, Waterford.

The Technical and Apprenticeship Scholarships for boys were continued by Counties Limerick, Tipperary (N.R.), Tipperary (S.R.), and Waterford, and Tipperary (Joint Urban and Rural). All of these, except Co. Limerick, awarded Technical Scholarships which were held at the different Day Trades Preparatory Schools in the Province; while the winners of Apprenticeship Scholarships received appointments as Apprentices with various large firms, chiefly Railway Engineering, Shipbuilding, etc., in Dublin, Belfast, and elsewhere in Ireland.

The County Societies were so much concerned with the work of the smaller urban and town centres, that the preceding paragraphs give a general survey of the ground covered. Co. Limerick is the only County that has no urban district, and the permanent work in Abbeyfeale and Newcastle West consists of Women's Industries.

All counties continued to send instructors into the Rural districts where Manual Instruction in Woodwork and Domestic Economy Courses were conducted, and as these Courses have become so well established there is little to report except steady progress. In many of the rural districts, however, good and regular attendance was hindered by various causes, such as pressure of agricultural work at certain seasons, inclement weather, and in some cases small and uncomfortable rooms for the accommodation of the classes. It is surprising that students attend where there is so much discomfort; it is an example of education under adverse circumstances, and it shows the missionary spirit of the instructors when they are able to maintain any interest or enthusiasm under such conditions. There is much need in rural centres for more suitable accommodation for these courses. Notwithstanding the foregoing conditions the attendance generally shows no signs of decadence, and the work done by the County Instructors is a matter for congratulation.

During the past Session a very useful scheme of co-operation between the Agricultural and Technical Instruction Committees of County Cork was carried out. During the winter when the Manual Instructors were engaged in the towns Agricultural Instructors conducted classes in the rural districts, and during the Summer the Manual Instructors went to those centres and taught Woodwork to the same students, with so much success that the same arrangement will be followed in future Sessions.

A new departure which was not contemplated by any Scheme was the introduction of a Course in Farriery by the County Committee of

Tipperary (N.R.) at the suggestion of the Department who become financially responsible for the Course. A highly qualified expert farrier opened three classes at Nenagh and Thurles. Young blacksmiths cycled or walked from within a radius of 6 or 7 miles to the selected forges where the instruction was given. They were taught the most improved methods of making shoes for normal and abnormal feet; they were shown how to use the best tools, and taught by means of specimens the structure and action of the horse's foot and leg. During the daytime the Instructor visited his students' forges, when horses that had presented difficulties in shoeing were brought to him for treatment. The students acquired a good deal of useful information and increased their skillfulness in practical work so much that arrangements have been made to repeat the Course in other districts.

COUNTY BOROUGH.

The three County Boroughs are now in possession of new buildings which form well equipped Technical Institutes, and since the opening of these there has been a large increase in the number of students attending. In some of the Courses this increase has been beyond the expectation of the Committees concerned, and already the accommodation is insufficient for the number of students demanding admission. In Cork there is congestion caused by the unprecedented number wishing to join the Domestic Economy Courses, and rooms which have been equipped temporarily to meet the demand have been taken from other departments. In Limerick the Institute stopped short of what was originally intended, and the Building Trades and Applied Art Courses are still housed in the Athenaeum which is a long distance from the Institute. In Waterford one large room had to be divided to give additional accommodation to the Commercial Classes, but still the building is too small, and there is very little ground area for expansion. Unfortunately these Committees have no funds for extension.

In future a natural development of the work of these Committees will be in the direction of day classes for apprentices, and to a limited extent the Limerick and Waterford Committees have already secured the co-operation of employers of labour in establishing such classes. Cork has not yet entered upon this scheme, but it is expected that arrangements will soon be made for conducting special day classes for the instruction of apprentices. There is an excellent equipment for the purpose, and the staff are able and willing to undertake the work.

SECONDARY SCHOOLS.

There were 73 Schools that continued to follow the Department's Programme in Experimental Science and Drawing. The 4 Day Trades Preparatory Schools at Cork, Clonmel, Queenstown and Waterford were well attended, and in addition to the ordinary fee-paying and local scholarship pupils they had Technical Scholarship holders from the three Counties, Tipperary (N.R.), Tipperary (S.R.) and Waterford, which had adopted the new scheme of Technical and Apprenticeship Scholarships. The Course at Queenstown and part of that at Cork were drawn up to suit the requirements of the Entrance Examination to H.M. Dockyard at Haulbowline, and several pupils passed that examination during the Session. At the same time the Programmes of these schools satisfied the conditions laid down by the Department for the working of Trades Preparatory Schools. It has been found very difficult to retain pupils for a third year, and even in the second year they are sometimes tempted to leave school to fill desirable posts, so great is the demand for lads who have been trained in these Schools, in preference to the ordinary day school type. In addition to the Day Trades Preparatory Schools there were 5 Schools that did not come under the regulations of the Intermediate Education Board. The other 64 were Intermediate Schools, and their courses of study were similar to those of the preceding year. The auxiliary courses in Manual

Instruction for boys and Domestic Economy for girls were continued with 21 schools taking the former and 13 the latter, as compared with 22 and 12 respectively in the previous year. There are also 21 Girls' Schools which take special courses in Domestic Economy. Nearly 50 per cent. of the Boys' Schools have courses in Manual Instruction, and 80 per cent. of the Girls' Schools courses in Domestic Economy. The gradual decrease in the number of the former is disappointing, but the rapid increase in the number of students receiving instructions in Domestic Economy is very gratifying. As was to be expected there was a further increase in the number of Schools taking Physical and Commercial Geography; 6 followed the Third Year and 3 the Fourth Year Course, and while there was a desire on the part of the teachers to make the Course as practical as possible the broader features of the subject were often obscured by excessive detail. There were signs of progress, however, and with a little more experience the teachers will be able to establish the work on a sound educational basis. The favourite Special Course in Boys' Schools is still Chemistry, not because of any particular outlet in the form of Industry, but rather because it is the natural sequence of the Second Year of the Preliminary Course in Experimental Science. It is to be regretted that so few schools take up the study of Botany and Physiology, the latter because of its intensely human interest, and the former because of its value in relation to Agriculture, quite apart from the general education worth of both. There is very little or no room for them in the ordinary Intermediate curriculum; they do not exist in the curricula of Boys' Schools, and when Girls' Schools adopt the most desirable of all Special Courses, viz., Domestic Economy, they find they have too little time for a second Special Course.

PRIMARY SCHOOLS.

Of the 39 Schools which are examined in Elementary Drawing 30 are Christian Brothers' Schools, 8 are Industrial Schools, and one is a small Convent School. These do not participate in any Public Grant for Primary Education from the National Board and are therefore eligible for Drawing Grants administered by the Department. The best work all round is produced by the Industrial Schools, mainly because the pupils are well fed, clean and physically fit, and as they are under strict discipline and consequently most regular in attendance they are under the best conditions for benefitting by the instruction. The Industrial Schools also give instruction in Woodwork, and, as in the case of Drawing, the training has proved of considerable value to the pupils. Many of the other Schools, although working under adverse circumstances, secure the highest grant for excellence. The main drawback from which many schools suffer is the frequent change of teachers and consequent lack of co-operation among the members of the same staff in the matter of arranging Syllabuses of work so as to secure a progressive sequence of lessons for the different Standards.

DR. GARRETT, *Inspector for the Northern District*, reports:—

COUNTY SCHEMES.

Technical Instruction Schemes have again been conducted by all the nine counties of Ulster.

In the five counties, Antrim, Fermanagh, Londonderry, Monaghan, and Tyrone, the needs of the smaller Urban Districts were provided for by means of Technical Schools under the County Committees. New Technical Schools were opened at Downpatrick in Co. Down, and at Portstewart in Co. Londonderry. It is interesting to note that the success of the Downpatrick School led to a re-organisation of the County Down Scheme which will in future include the smaller Urban Districts.

The work of these schools is dealt with in the report on Technical Schools. The only special feature which need be referred to here is that a considerably larger proportion of the students in attendance are drawn from the surround-

ing rural districts than is the case in schools under purely urban control. These students are mainly of the farming class, and special arrangements have in several cases been made to suit their convenience by holding afternoon classes. The type of work, particularly in the case of men, is assuming a character specially adapted to the needs of farmers.

In all the Counties Itinerant Instruction has formed an important portion of the work, but the volume of it varies from six courses in Fermanagh to twenty-three in Donegal. In four Counties, Cavan, Fermanagh, Monaghan, and Tyrone very little instruction in Domestic Economy was given in rural centres, while in Antrim and Londonderry the number of Courses of Manual Instruction was small. Altogether 133 courses were held, a number which is practically the same as in the previous year. Of these 57 were in Manual Instruction, 72 in Domestic Subjects, 2 in Art and 2 in Commercial Work.

The classes were, on the whole, well filled and the attendance was good. In 46 per cent. of the classes the students made at least 70 per cent. of the possible attendance, in only 14 per cent. did the attendance fall below 50 per cent. In Londonderry and Tyrone the regularity of attendance was specially noticeable.

Fairly satisfactory accommodation was, in general, secured, but in some districts, particularly in Cavan, suitable rooms are difficult, if not impossible, to obtain, and the teachers work at a considerable disadvantage.

The classes generally were well taught, and it is satisfactory to note that there has been a distinct improvement in the teaching of Manual Instruction. Mechanical Drawing is now very generally taught in such a manner as to secure that students learn to make and read a working drawing. The use of blue prints in the construction of larger articles is extending, but there is still room for improvement in the selection and grading of these articles.

In some of the Domestic Courses there has been a tendency to enrol more students than could be efficiently taught. The result was that the earlier meetings were overcrowded and a falling off took place.

Industries classes have been conducted in the same six counties as last year, 32 being for instruction in Crochet-work and 16 in Spinning. These classes aim at establishing home industries in districts remote from towns where the girls are engaged mainly in field work. They provide remunerative occupation during the seasons when the amount of field work is small. It is therefore satisfactory to note that 21 of the classes may now be regarded as well established centres of industry, while 17 others show promise. Four were closed during the year, largely on account of bad management.

During the session there was a slackening of the demand for certain types of lace, but where the teachers were alive to market requirements the sales have been only slightly affected. On the other hand, where teachers have gone on producing unmarketable varieties, as was the case in several of the Fermanagh classes, sales fell considerably. In other counties the proceeds of the classes increased.

A general improvement is noticeable in the keeping of the accounts of the industries, and the regulations issued by the Department during the session have assisted towards this end.

Efforts are being made to secure better housing accommodation for the industries and to raise the standard of comfort.

TECHNICAL SCHOOLS.

In the past session 34 Technical Schools have been conducted in Ulster. The two largest are those situated in the County Boroughs of Belfast and Londonderry. 16 others are managed by Urban Committees, while the remaining 16 are under the control of County Committees.

The number of students enrolled was the largest yet recorded and fell very little short of 13,000. In the older urban schools the numbers from year to year are surprisingly constant. The only changes at all noteworthy are an increase at Armagh due to the opening of the new building and decreases at Larne and Newtownards.

Improvements in the housing of the schools continue to be made. Arragh has now an excellent building which removes the principal difficulties under which the teaching laboured in the past. It is expected also that the new building in Magherafelt, where successful work has for some time been carried on in very indifferent class-rooms, will be available for occupation early next session. It should be mentioned that the cost of this building is being mainly defrayed by a special *jd.* rate levied over the Rural District. Considerable additions are being made at Ballymena to meet the growing needs of the school.

The work done in the schools continues to improve and the lines of progress are becoming clearly defined. In almost every school care is now taken to classify new students according to their educational attainments. Those who are unfit to follow a specialised course with profit are required to take the Introductory Course and the increased efforts to make this course a suitable preparation for higher work have led to a larger proportion of students passing on into the higher classes. More than 52 per cent. of the Introductory students of last session proceeded with their studies. This number is not yet all that could be desired, but it is an increase of 6 per cent. on the previous year.

Little by little also clearly defined courses are being drawn up to meet the requirements of the various local trades, industries and commercial undertakings, and, as the students realise the advantages to be obtained from systematic and well balanced courses of study, less and less difficulty is being found in persuading them to follow such courses. Progress in the formulation of suitable courses has not been equally rapid in all directions. Mechanical Engineering and Textile Courses have been the first to assume a thoroughly satisfactory form; Building Trades, Electrical Engineering, Chemistry and Art are following suit, but in most cases only faint-hearted efforts have been made to evolve suitable courses of Commerce. The varieties of requirement in this branch are no doubt greater than in most others and the fact that there is greater freedom for employees to pass from one branch of commerce to another adds a further difficulty. The fact, however, remains that there is a considerably more rapid falling away of commercial students than of those in other courses, and the higher classes are likely to remain small until teachers take greater pains to study the necessities of the different types of clerical employees, and to arrange their courses accordingly. The organisation of courses of Domestic Economy presents some peculiarities. Generally speaking, difficulty is found in securing attendance for two evenings per week throughout the session. In the County Boroughs the difficulty is avoided by enrolling Domestic students for term classes. By this means a very regular attendance is secured, but the number of students who proceed to a second or third term is rather unsatisfactory and the amount of instruction which can be given in a single term (consisting in Belfast of about 13 weeks) is very small. In some of the smaller schools, especially those under County Committees, the difficulty is met by increasing the period of lessons to 2½ or 3 hours and subdividing the time between the essential subjects. This plan is working well.

It is satisfactory to be able to state that the amount of advanced work done in the schools is steadily increasing. This may perhaps best be realised when it is stated that in the past two years the number of students in attendance at the second and higher years of the courses has increased by 30 per cent. while the total number of students has only increased by 3·7 per cent. in the same period. It will thus be seen that there is a considerably larger volume of advanced work being done—an improvement which is almost entirely to be attributed to the development of the course system which enables students to attend advanced instruction with profit.

One of the greatest difficulties experienced, particularly in the smaller schools remote from large centres, has been and to some extent still is the dearth of local teachers of commercial subjects. The Principals of the Schools have, however, encouraged students possessing practical experience

to improve their qualifications, and in the older schools there is now little difficulty in obtaining local teachers to replace those who had formerly come from some distant centre. By this means greater economy has resulted, and a widening of the scope of the instruction has been rendered possible. Further, the local teachers are found to take greater interest in the progress of their students and to have greater influence with them. In Belfast the training of occasional teachers of special subjects is a permanent problem which is met by frequent discussions of methods of teaching in teachers' meetings and by the careful formulation of courses under the guidance of Heads of Departments.

A marked change has in recent years appeared in the attitude of employers towards the work of the Technical Schools. This change manifests itself in the encouragement now given to the work. In some cases employers pay the fees of their employees, in others they grant facilities for attendance at day classes, in others they increase the wages or shorten the period of apprenticeship in recognition of regular attendance and proved progress.

At 18 of the Technical Schools over 900 National School Girls attended day classes for instruction in Cookery and other Domestic subjects. These children were the senior pupils of 79 National Schools, and they received a training under highly qualified teachers and in more suitable rooms than could be obtained in the local schools. It is gratifying to note that many of those who have passed through these classes in the last few sessions are now in attendance at Evening Technical Schools and the benefit of their preliminary training is abundantly apparent.

SECONDARY SCHOOLS.

During the past session 77 schools have followed the Department's Programme for Secondary Schools. This number includes five Trades Preparatory Schools. All the subjects of the Programme are being taught in the District. No noteworthy change has taken place in the distribution of the subjects over the schools, but it is not without interest to report that the teaching of Domestic Science is extending even into mixed schools. The subject is now taught in 15 schools. The new Course, Physical and Commercial Geography, is taken by 5 schools.

The discontinuance of the Preparatory Grade by the Intermediate Education Board is having the effect in some cases of delaying the beginning of Science instruction until the pupils are ready to enter the Junior Grade. The effect of this is that the pupils are better prepared for the instruction and are in consequence able to make sounder and more rapid progress.

A high standard of efficiency has again been maintained in the teaching generally, but a slight falling off was noticeable in Introductory Chemistry due to the fact that several teachers began the course with a superficial examination of a number of substances. This method of treatment failed to give the pupils a thorough knowledge of simple laboratory processes and of the principles of investigation, and the defect persisted throughout the year's work. The pupils in their later work resembled workmen attempting to construct without sufficient skill and practice in the use of tools.

The necessity for special equipment for the teaching of Geography has not been fully realised and some of the methods employed have in consequence lacked that precision and accuracy which is expected in a Special Course. Improvement is noticeable in the surveying work done, but the meteorological side has been only fairly well treated. Few of the schools have kept full consecutive records of weather observations or have attempted to trace the connection between the observations made and weather conditions.

The work done in the Special Course of Physiology continues to be very careful and painstaking but misguided. More successful efforts have been made to bring the teaching of Hygiene into close relationship with that of Physiology, but teachers are liable to overload their courses with a mass of

ill-digested technical detail which has very little educative value. The physiological chemistry taught usually includes much that is entirely beyond the comprehension of pupils and is purely empirical. Little improvement can be expected until this part of the course is based upon the work done in Introductory Chemistry.

The Special Courses of Chemistry and Physics are those most widely taught in Boys' Schools and much excellent instruction is given. The weakness in the treatment of the Third Year Course of Physics has been the neglect of any consideration of "Energy" and "Work" in the earlier part of the course. In consequence of this these fundamental conceptions are left until the end of the Mechanics section, and the inadequate treatment then accorded to them fails to secure thorough comprehension on the part of the pupils.

The teaching of Drawing in the schools has probably improved at a greater rate in recent years than the teaching of Science. A good many schools have now provided themselves with suitable single desks which render the instruction more efficient. The work done in Geometrical Drawing is, however, still capable of considerable improvement.

The Trades Preparatory Schools are little by little gaining greater hold on the confidence of the District. In small towns such as Ballymena and Portadown progress is slow, but with efficient teaching there can be no doubt that they will ultimately develop into very important centres of instruction. As it is, the best students obtained in the Technical Schools are those who have passed through the Trades Preparatory Schools. It is also satisfactory to note that almost all the students continue their instruction at the Technical Schools when they leave.

PRIMARY SCHOOLS.

Instruction of a primary character was given in drawing at the same twelve boys' schools as in the previous year.

In nine of the schools the instruction was of a very satisfactory standard and the award "Excellent" was secured. In the remaining three the standard reached was "Good." The work done in these schools suffers from the large size of the classes and also because of the poor qualifications of the teachers. The progress made is therefore all the more surprising.

In four of the schools instruction in manual work was also given. Only one of these failed to secure the "Excellent" award.

MR. McCaffery, *Inspector of the South Central District*, reports:—

COUNTY SCHEMES.

Hitherto the County Schemes in this district have omitted to provide instruction in commercial subjects in unurbanised towns, but during the session under review an effort was made to remedy this defect in the case of the Kildare Scheme. Classes in bookkeeping were opened in Newbridge and attracted a large number of suitable students. It is to be hoped that the success which attended this new departure may stimulate Committees in other counties to make similar efforts, for the need for instruction in business methods, correspondence and book keeping is at least as great in the smaller centres of population as in the larger ones. Amongst the difficulties to be overcome are the scarcity of fully qualified teachers outside the Urban Districts and the shortage of scheme funds, but the former is not by any means an insurmountable obstacle, whilst Committees are offered a means of overcoming the latter in the attendance grants available for instruction in the subjects mentioned. It is feared, however, that little improvement in this direction can be hoped for until those whose interests are directly involved realise their needs and besite themselves, or the responsible organising officers are aroused to take some interest in the work of providing suitable technical instruction for young people engaged in commercial pursuits in the smaller towns.

Scholarship schemes were in operation in the counties of Kilkenny, Carlow and Wexford. The Kilkenny scholarships are for boys only and are tenable to the Kilkenny Day Trades Preparatory School. Of fourteen boys provided with free places at this school only two came from the county area and neither of these, owing to exceptional circumstances, was in receipt of the usual maintenance allowance which varies from £8 to £12 according to the distance of the scholars' home from Kilkenny. The failure of the maintenance allowance and the prospect of free education of an eminently practical character to secure the attendance of suitable boys from the rural districts in larger numbers during recent years is noteworthy. It would appear that the standard of the qualifying examination presents a greater difficulty in this county than in others where scholarship schemes for boys are in operation. A supplement to the Kilkenny scholarship scheme provides prizes of £10 for the two boys who have been the most successful during their career in the Trades Preparatory School. These prizes, which only become payable when the boys have entered on an apprenticeship or taken up work under approved conditions, have gone this session to two boys who have found suitable employment with an engineering firm in Stafford. Under the Wexford scheme seven domestic economy scholarships were awarded and all were held at the Kilmore School of Domestic Training. Ten similar scholarships were awarded under the Carlow Scheme and of these six were made tenable at the Stradbally School and four at the Kilmore School. The Wexford scholarships are awarded on the results of an examination conducted by the Committee, whilst those of Carlow are awarded by the vote of the Committee—but in neither case is there any difficulty in securing a full supply of suitable candidates.

Classes for national school teachers have formed a noticeable feature of the county work in Kildare and Carlow. Classes in domestic economy were again conducted under the auspices of the Carlow Committee in Carlow and Tullow and a number of teachers were thereby enabled to take the practical examination held at the conclusion of the second year's course of training. A class in manual instruction was conducted in the Naas Technical School and a class in the Irish language at the Athy Technical School, and both were very successful. Courses of instruction in rural science and school gardening were conducted by an expert employed by the Department in Naas, Athy, Tullow and Bagenalstown. The Naas and Athy courses secured a fair attendance whilst the attendance at the other courses was decidedly good. The teacher-students displayed a keen and praiseworthy interest in their work.

The organisation of courses of instruction in rural centres is work of an important and somewhat complex nature. It includes the distribution of the benefits of the scheme fairly over the area administered, the obtaining of suitable class rooms and their preparation for the work to be done in them, the securing of suitable lodgings for the teachers within reasonable distance of the class rooms, the arrangement of the time-tables to suit local needs and convenience and facilitate future work, the arousing of local interest and enthusiasm, the proper control of the class-entries, and the keeping of satisfactory records of the attendance and progress of students.

Very satisfactory efforts have been made in all the counties this session to distribute the benefits of the schemes fairly. The instructors have conducted courses of instruction in 58 individual centres as against 44 in the preceding academic year. Of these centres ten had not previously received any benefits under the Act. The annual rate at which new centres are being opened has been diminishing for several sessions; thus it dropped from 40 in 1909-10 to 14 in 1910-11 and to 13 in the succeeding session. The need for utilising the services of the teachers in revisiting old centres to give instruction to new generations of students, and the greater difficulties being met with in organising courses in the remote and less accessible places which still remain to be visited fully account for this diminishing rate.

The accommodation secured has been good and satisfactorily prepared

except in a couple of centres which, by the way, were not new centres. The character of the accommodation is steadily improving over the district and at the same time the practice of utilising national schools for instruction in domestic economy is dying out. The instructors have found suitable lodgings within reasonable distance of the classes in all the counties except one. In the exceptional case the expenses for car fares have been so heavy as to lead to a serious curtailment of the activity of the scheme in the teaching of domestic economy.

There has been much improvement in the keeping of records of the attendance and progress of students but in a couple of counties this work does not yet receive adequate attention.

Class entries have been properly controlled except in the courses conducted by two instructresses who have allowed their anxiety to secure large classes to over-ride their discretion. It is a noteworthy coincidence that in centres where national school pupils have been enrolled without check in the domestic economy classes the percentage attendance of ordinary students has been low; and furthermore, there is some evidence which seems to indicate a direct connection by way of cause and effect between the presence of school children at classes and the absence of ordinary students.

During this session the manual instructors have visited 22 centres and conducted 36 courses in woodwork and technical drawing, and the instructresses have visited 46 centres and given 73 courses on domestic economy subjects. There has therefore been a decrease of 7 courses in manual instruction and an increase of 3 courses in domestic science as compared with the corresponding numbers for the session 1911-12. The number of courses in manual instruction has increased in Kildare and decreased in Wexford and Kilkenny. These changes in Kildare and Kilkenny are the results of corresponding changes in the teaching staff. The increase in the number of courses in domestic science may be attributed to the employment of an additional instructress in certain out-lying villages of County Wicklow during the summer months. The main facts concerning the work of itinerant instruction during this session are set out below, together with the corresponding figures for the preceding academic year.

Summary of the work of Itinerant Instruction for Sessions 1911-12 and 1912-13:—

County.	No. of new centres opened.		No. of individual centres visited.		No. of M. I. courses given.		No. of D. E. courses given.	
	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13
Wexford,	7	2	12	13	12	8	21	24
Kilkenny,	1	3	14	16	11	3	16	22
Carlow,	3	3	11	12	10	10	18	13
Wicklow,	2	2	6	9	5	9	4	8
Kildare,	6	1	6	9	2	6	11	6
Totals,	13	11	49	58	43	36	70	73

The teaching is good in the main in the manual instruction courses, the chief defect being the neglect of technical drawing in connection with the later exercises of the courses just where good working drawings become most useful and necessary. There is some diversity in the efficiency of the teaching in domestic economy, but it rarely falls below what may be regarded as a satisfactory standard.

URBAN DISTRICT SCHEMES, INCLUDING TECHNICAL SCHOOLS IN COUNTY AREAS.

The operations of several of the Urban Schemes continue to be hampered by difficulties arising from inadequate, inconvenient and unsuitable accommodation. In this connection reference was made in last session's report to Arklow and Kilkenny as places where the work of technical instruction has been seriously handicapped for many years by defects of this kind. Plans for a new school at Arklow were approved more than a year ago, but the work of erection has not yet been started. In Kilkenny matters have progressed as far as the setting aside of the new grants accruing to the scheme under the operation of Section II. (b) of the Programme to form the nucleus of a fund for building and equipping a new school; but beyond this no very definite step has been taken. At Naas the school, which has hitherto been sufficient for the needs of the district, proved quite inadequate for the number of classes successfully opened during the session, and additional accommodation had to be found in a neighbouring national school. There is nothing in the nature of a central institute in Carlow; the classes carried on under the auspices of the Committee are accommodated in the class-rooms of two secondary schools. Two small extensions in the way of accommodation may be chronicled: in the Wicklow school a large class-room which heretofore has been used as the manual workshop has been set free for ordinary purposes by the provision of a new workshop in the underground basement; and in Wexford a small metal workshop has been suitably equipped for the use of engineering students.

In every urban centre except Carlow, the technical school is organised and carried on under the direction of a superintendent principal. The specialised courses most commonly found in the schools are those in commerce, domestic science and builders' work but in these a few gaps occurred this session, thus a course in commerce was missing in Arklow, one in domestic science in Enniscorthy and one in builders' work in Wexford. In addition to the common courses just mentioned, art courses were conducted in Kilkenny, Wexford, Naas and Athy; engineering courses in Kilkenny, Wexford, Arklow, and Wicklow; and handicraft courses in Enniscorthy, New Ross and Athy. The special items in the list of specialised courses were a farmers' course in Naas and Athy, an Irish course in Athy, and a cabinet-making course in Enniscorthy.

The number of qualified students pursuing their studies in organised courses is increasing steadily from session to session over the district, but the increase is not general, for whilst the number of such students has increased in Naas, Athy and Enniscorthy, it has decreased in Wicklow, Kilkenny and New Ross. The commercial course is the most popular course: it attracts more than a third of all the qualified students in attendance at the schools. Next in order of popularity is the domestic science course.

The inauguration of a scheme of examinations based on the course system has had a beneficial influence on the organisation of the schools by leading to improvement in the syllabuses of instruction, and by providing students and teachers with a suitable objective.

The schools, though organised primarily to meet the needs of students who can attend instruction only after ordinary business hours, have generally found it expedient to open classes earlier in the day. For example, day classes in domestic economy for national school pupils were carried on under approved conditions in the Bray, Arklow, and Kilkenny schools; afternoon classes in art for advanced students were conducted in Kilkenny and Wexford as in the preceding session, and secured a fair measure of support; and afternoon classes in domestic economy for ordinary students formed an important feature of the work in nearly all the schools. The day classes for ordinary students are not as well attended as the evening classes but they have been found useful in various ways and may be regarded as a necessity.

SECONDARY SCHOOLS.

The number of secondary schools taking experimental science and drawing in this district was twenty-nine as in the preceding session. This number does not include the Kilkenny Day Trades Preparatory School nor the Kilmore Residential School of Domestic Training, which are schools working under regulations not applicable to ordinary secondary schools. The ordinary secondary schools are required to provide a two years' preliminary course in experimental science and drawing, and, in addition, either a concomitant auxiliary course for junior pupils or a special course for senior pupils. The auxiliary course must be manual instruction for boys, and domestic economy for girls. The main facts regarding the preliminary course are shown in the following.

SUMMARY OF PRELIMINARY COURSE CLASSES.

Schools.	Experimental Science and Drawing.		Manual Instruction.		Domestic Economy.		Totals.
	First Year.	Second Year.	First Year.	Second Year.	First Year.	Second Year.	
Boys'.	17	17	9	7	—	—	50
Girls'.	11	11	—	—	6	4	32
Mixed.	1	1	—	—	—	—	2
Totals.	29	29	9	7	6	4	84

This summary differs from that of the previous academic year only in regard to the particulars concerning the auxiliary courses. There is a decrease of one in the number of first year and of three in the number of second year manual instruction classes, and an increase of one in the number of first year and of two in the number of second year domestic economy classes. Classes in the auxiliary courses disappear and reappear from session to session somewhat irregularly, but changes in the teaching staff are responsible for most of the variations.

Special courses were taken in all the girls' schools, and in all the boys' schools except one. Six special courses were presented in three girls' schools; four in three girls' schools; three in one boys' school; two in three boys' and one girls' schools; and one in twelve boys' and four girls' schools. The number of schools providing each of the special courses will be seen from the following.

SUMMARY OF SPECIAL COURSE CLASSES.

Special Courses.	Boys' Schools.		Girls' Schools.		Mixed Schools.		Totals.
	Third Year.	Third Year.	Third Year.	Fourth Year.	Third Year.	Fourth Year.	
Chemistry.	11	1	—	—	1	—	13
Physics.	2	1	—	—	—	—	3
Mechanics.	1	—	—	—	—	—	1
Drawing.	4	—	5	5	—	—	14
Domestic Economy.	—	—	8	6	—	—	14
Physiology and Hygiene.	—	—	4	4	—	—	8
Botany.	—	—	3	—	—	—	3
Geography.	1	—	1	—	—	—	2
Totals.	19	2	21	15	1	—	58

In connection with this summary it may be noted (1) that geography and drawing are the only special courses taken in both boys' and girls' schools; (2) that geography appears in the curricula of two schools for the first time; and (3) that fluctuations in the numbers of schools taking special courses in chemistry, drawing, and domestic economy have become a feature of each session's record. These fluctuations are caused by changes in the teaching staff in the case of chemistry and drawing, but in the case of domestic economy the causes operating are less patent.

It was noted in the last report that laboratories and workshops had been used for the teaching of subjects other than experimental science and woodwork. There has been no appreciable extension of the practice during this session and even where it still obtains there has been less evidence of interference with approved arrangements than formerly.

PRIMARY DRAWING.

Examinations in Drawing were conducted in the primary departments of three girls' schools and twelve boys' schools. Four schools presented pupils in Standard V, and two in Standard VI. Pupils are found in both Standards V and VI only where there is no organised secondary department taking experimental science as a subject for the Intermediate Education Board's Examinations, but it is usual to find in schools of 235 pupils and upwards a Standard V working concurrently with a secondary department. The total number of pupils entered on the examination schedules was 6 per cent. more than in the preceding session, but of the pupils entered on the schedules only 50 per cent. were actually presented for examination, or 6 per cent. less than in the preceding session. This decrease is traceable to outbreaks of disease especially affecting children in Wexford and along the upper valley of the Barrow.

Two girls' schools were classed as excellent, as in the preceding session, whilst the third which was examined for the first time was classed as good. Of the boys' schools four were classed as excellent, and eight as good. Whilst this classification agrees with that for the previous year the fact that cautions were administered in only two cases this session indicates an increase in the efficiency of the teaching in several schools.

Drawing was very fair in Standard I and good in Standard II. Freshhand from flat examples is very good in all standards above the second, and model drawing in Standards V and VI is good. Mechanical drawing is good in Standards III and IV and the pupils' knowledge of practical geometry in the two higher standards is fairly good. These facts may be summarised in the statement that the work has improved in all the standards except the first in which the level remains as before.

The use of slates which is permissible in the first standard is gradually disappearing. At the examinations conducted during the session the pupils of Standard I worked on paper in nine schools.

MR. MCGANN, *Junior Inspector (West Central District)*, reports:—

COUNTY SCHEMES.

In this district, which comprises the province of Connaught and the counties of Clare, Longford and Westmeath, Technical Instruction schemes were continued on practically the same lines as last year. Eight counties provided itinerant instruction in Drawing and Woodwork, six in Commercial subjects, one in Crochetwork and seven in Domestic Economy. In Galway and Leitrim experts in Home-sewing and Dress-making were also employed, and in the rural districts of Galway a trained nurse gave instruction in Hygiene and Home-nursing. Thirty-four teachers were employed throughout the session, and classes were held in one hundred and twenty-one rural centres. Six committees awarded boy scholarships tenable in Trade Preparatory Schools, and the Committees of Clare and Westmeath awarded girl scholarships tenable in Residential Schools of Domestic Training. At one rural centre a permanent Technical School is established.

A report on the accommodation available for itinerant classes in the west must be a reiteration of what has already appeared eleven times—with few exceptions the places in which country classes were held were unsuitable in point of location, approach, condition, and extent. Visits of inspection were paid to eighty-eight rural centres and in almost every instance the equipment and instruction were found satisfactory but the efficiency of the latter was very materially impaired by bad or indifferent accommodation. It is lamentable to think that large areas must be deprived of the advantages of instruction or the classes must be held in condemned school-houses, barns without fireplaces, insanitary market sheds, ill adapted courthouses or dilapidated jails. In these, teachers try to inculcate habits of neatness and order and demonstrate how the peasant's home may be made brighter and more attractive. The task is almost as impossible as it is noble.

The domestic economy classes were in the main well attended by grown pupils of a good type. In Cookery the material and utensils available in the homes of the pupils were employed; the repair and adaptation of worn clothing formed the major portion of the instruction in home-sewing, and the essentials of a healthy existence were impressed on the minds of the pupils although whilst the instruction was being imparted, the canons of hygiene were of necessity not strictly observed. A few of the teachers visit the homes of the pupils and do laudable and successful work therein, but the majority of the instructresses confine their duties to the class-room. This is to be regretted. Tactful and sympathetic "Visiting" is the most efficacious method of bringing about a much needed change in rural homes. Vegetable cookery is neglected and the scarcity of vegetables is pleaded in excuse. Committees should see that the work of the horticultural instructors and domestic economy teachers is so co-ordinated as to effect an improvement. Cottage instruction was attempted in Clare and Westmeath only; in Clare the instructress spent her forenoons among the fisherfolk often helping the mothers to clean, clothe and feed their little ones, and inducing them to visit her cottage, see how it was kept and remain for instruction, but in Westmeath the work was not a success. On the whole the teachers discharged their duties, often under trying conditions, with commendable zeal and assiduity.

Despite the inconvenient situation of the workshops, the sparse population and the severe weather, the classes in woodwork were as satisfactorily attended as the demands of field work permitted. The farm worker rarely complains however ill-ventilated, congested or draughty the shelter in which he is a pupil, and it is pleasing to record that, notwithstanding the wretched accommodation, praiseworthy efforts were made to execute working drawings and well finished articles for the home and farmstead. Many of the young farmers who attended provided themselves with tools and benches to continue the work in their own homes when the instructor had left for another centre. Owing to the dearth of recognised instructors the counties of Galway and Leitrim were unable to meet the demands for instruction.

The type of pupil that attended the Commercial classes left much to be desired. Pupils at or just left school freely availed of the instruction, but the youths engaged in business houses, the persons for whom it is primarily intended, failed to appreciate the opportunities offered them and were unresponsive to the Committee's appeals.

The progress of the boy scholarship holders was very satisfactory, their scholarships have been renewed for another session, and arrangements are in progress for the admission of those of suitable age as apprentices to engineering and other firms.

The only permanent Technical School in the rural areas of this district is that at Mullingar, and it is still held in the old jail, an insanitary and unsuitable building, difficult of approach, and repulsive on account of its condition and associations. It was fairly attended, however, by Introductory, Commercial, Trade, and Domestic pupils, and their instruction was as efficient as could be expected under the conditions.

Nineteen girls, six from Clare and thirteen from Westmeath, held scholarships in Residential Schools of Domestic Training and received excellent instruction in every branch of housecraft. The curriculum of the Moate School, the efficiency of its instruction and the progress of its pupils, are worthy of special commendation.

URBAN SCIENCES.

In the urban districts instruction was given in the same buildings and on the same lines as last year. No improvement was effected in the accommodation which at Sligo may be considered satisfactory but at the other centres varies from indifferent to bad. Except at Athlone, where space sorely needed for class rooms was occupied by idle machinery, the most was made of the available accommodation, and the school premises were satisfactorily kept. Organized courses of instruction were followed at Athlone, Galway, Sligo, and Ballinasloe, but only in the Introductory and Commercial Courses was the number of grant-earning pupils satisfactory, and the leakage after the first year spent in the Commercial Course is great. In the Domestic and Trade Courses the numbers were small and in the Art and Pure Science Courses smaller still. The paucity of Trade pupils may, to some extent at least, be accounted for by the absence of industries and the few buildings now in course of erection in the towns, but the small number of Domestic pupils must be due to defective organisation. The increase in the number of Course pupils in Galway and their more regular attendance has materially improved the school revenue. The Day Trade Preparatory School at Sligo continued its useful work, the high standard of its teaching was well maintained, and the progress of the majority of its pupils was excellent. The number on roll was increased, but this was mainly owing to the presence of county scholars, and there is little improvement in the number or type of the urban boys who take advantage of the facilities afforded for acquiring a sound practical education. A pleasing feature of the work in Sligo was the well maintained attendance at the Forthall classes where successful instruction in housecraft has been brought home to the poorer residents. Special classes in Science, Drawing, and Domestic Economy for school teachers were held on Saturdays at Galway and Sligo; many teachers travelled long distances to avail of the instruction and made very good progress.

At Ballina, Castlebar, and Westport instruction in Drawing, Woodwork, Domestic and Commercial subjects was continued, and although organised courses were not in operation the instruction was suitable and useful. The urban districts of Longford, Granard, Ennis, and Kilsrush had short courses of instruction from the itinerant teachers employed by the Joint Committees who administer the schemes in these areas, and except at Ennis capitation grants were paid to the managers of Technical classes for girls. Until means are found to erect schools in these towns and organising headmasters with educational experience are appointed to conduct them, little further progress will be made. At each of them a good attendance of young persons engaged in farming and distribution should be secured for suitably designed courses in Domestic Farming and Business subjects. Unfortunately such persons do not yet fully realize or appreciate the necessity and advantages of instruction.

At Galway, Sligo and Spiddal classes for the instruction of school teachers in Irish were held under local management.

SECONDARY SCHOOLS.

During the academic year just closed twenty-nine schools followed the Department's Programme. Two of these were new, a Boys' School fitted with a satisfactory composite laboratory and a Girls' School fitted with a temporary one. With two exceptions the schools gave instruction in one or more of the following Special Courses:—Physics, Mechanics, Chemistry, Physiology and Hygiene, Domestic Science and Drawing. Botany, Physical and Commercial Geography were not taught. Of the five Girls'

Schools four gave instruction in Domestic Science and two of these took Physiology and Hygiene in addition. Manual Instruction was taught in eight schools, but four others with suitable equipment did not give instruction in the subject owing to the smallness of the attendance grant and the fact that the subject does not "count for an Intermediate Pass."

The laboratories, workshops and kitchens were on the whole well kept, the required supply of apparatus was maintained, and the stocks of materials were adequate. Few managers have yet so increased the supply of apparatus as to enable junior pupils to work the same experiments simultaneously, or have provided rough working benches at which easy repairs may be executed; and some think that a "going clock" is quite unnecessary.

Science was on the whole satisfactorily taught, and the aims of the Syllabuses were kept in view, but the defects pointed out in previous reports were not abated. These are:—insufficient preparation for lecture and laboratory work, failure to revise promptly and fully the pupil's records of experiments, and inadequate illustrations of facts and principles from everyday observations. The admission to the First Year Course of pupils, the standard of whose general education is too low to enable them to derive full advantage from the instruction was again evident in some schools. It is very unfair to the teachers and a grave injustice to the suitable pupils.

Instruction in Drawing was further improved, schemes of exercises were carefully prepared and graded, drawing boards, T and set squares were everywhere used, except in a few schools either single or dual desks were provided for pupils at Object Drawing, and some of the best teachers had reserved collections of interesting objects for use in their classes. In Geometrical Drawing too much time was devoted to problems and too little to the analysis, reproduction, modification and design of patterns; this may be due to the substitution of Modern Geometry for the Euclidean system and the effort to avail of the Drawing lesson to give instruction in Mathematics.

Instruction in Domestic Science continued praiseworthy. Whilst sufficient importance was attached to the efficient and expeditious performance of mechanical processes, due attention was paid to underlying principles, the economic expenditure of income, the keeping of household accounts, and personal hygiene.

The decline in the number of schools taking Manual Instruction is the regrettable feature of the year. With equipment and teachers available means should be found, notwithstanding the crowded state of the curriculum, to secure that instruction be given in a subject so useful to the majority of the pupils attending Secondary Schools.

PRIMARY SCHOOLS.

Eight schools gave instruction in Drawing and three in Woodwork. Of the former four received the award "excellent" and four were adjudged "good." Schemes of exercises are now prepared by the teachers, drawing boards and T squares are being gradually introduced in the Fourth and higher standards, and, except in two schools, slates have been discarded. Mechanical drawing and free drawing from flat examples are satisfactorily taught but the style of desk in use in the schools militates much against the efficiency of instruction in drawing from the round. The models in wood executed in the Manual Instruction classes were creditable, and the pupils' knowledge of working drawings and of the growth and structure of trees was good.

MR. B. INGRAM and MR. PRIOR, *Junior Inspectors (North Central District)*, report:—

COUNTY SCHEMES, INCLUDING TECHNICAL SCHOOLS UNDER COUNTY JOINT SCHEMES.

Schemes of Technical Instruction were again in operation in King's, Queen's, Meath, Louth, and Dublin Counties. In all cases these schemes

included the provision of instruction in temporary centres throughout the areas named, in permanent centres at Trim and Kells (Co. Meath) and Skerries (Co. Dublin), and in Technical Schools at Birr and Tullamore (King's Co.), Dundalk (Co. Louth), Navan (Co. Meath), Maryborough (Queen's Co.), and Balbriggan (Co. Dublin).

In all the above centres, with the exception of Maryborough, Trim, Kells, and Skerries, satisfactory accommodation has now been provided; in Tullamore and Navan special buildings have been erected or adapted solely to the needs of technical instruction. It is satisfactory to report that Committees generally have fully realized the urgency of good accommodation and the time should not be far distant when each of the above towns will possess a well built and properly equipped Technical School.

In the temporary centres the question of accommodation continued to offer the chief obstacle to the further improvement, and an extended scope, of the instruction provided, and unless adequate provision be made in this respect, anything in the nature of advanced instruction for the type of student attending classes in rural districts is almost impossible.

County Committees generally made provision at temporary centres for instruction in Domestic Economy, Woodwork, Commercial subjects (except Co. Louth), or Rural Science (except Counties Dublin and Meath): thus the foundations of a comprehensive scheme of rural education were laid; and a beginning was made (especially in Queen's Co.) to co-ordinate these studies so as to equip the rural student with a knowledge that would enable him to understand the economic position in which he has been placed.

The numbers attending the courses at temporary centres were, with very few exceptions, equal to previous records, and the average attendances indicated that the usefulness of the instruction had impressed the students with the necessity for continued and regular attendance.

Organised courses were in operation in the Technical Schools above mentioned (except in Balbriggan) and generally these were well supported. They did not, as a rule, extend for a longer period than two years, owing chiefly to the difficulty of providing the necessary teaching staff—a difficulty to which some of the Committees have given attention.

Much improvement was effected in the County Dublin area, inasmuch as the scheme provided for the male, as well as the female, population of the county. The results of the session's work at Skerries and Balbriggan reflected considerable credit on the efforts of the sub-committees in charge of these areas and on the free provision made for these centres by the County Committee; with certain additional facilities much could be done for the industries and trade in these towns.

Generally the value of the instruction offered in the county areas maintained a good standard, and the teachers manifested enthusiasm and ability throughout the session.

The schemes throughout the North Central District were on the whole administered on sound and economical lines; the cost of the courses generally engaged the earnest attention of the committees and, with the exception of some of the itinerant courses in Counties Dublin and Louth, was kept within a reasonable figure.

CO. BOROUGH OF DUBLIN AND URBAN DISTRICT SCHEMES.

Schemes of Technical Instruction were in continued operation in the County Borough of Dublin, and in the Urban Districts of Blackrock, Drogheda, Kingstown, Pembroke, and Rathmines.

Considerable attention was paid to the type of instruction included in these schemes, with the result that more distinct advance than heretofore was made in adapting the courses of instruction to the industrial and commercial needs of the respective districts. In the Urban areas of Drogheda, Kingstown, Pembroke, and Rathmines, the Committees succeeded in attracting a very good type of student, and a very satisfactory standard of teaching efficiency was well maintained until the end of the session.

Improvement was effected generally in the organisation of the schemes: efforts were made to secure the day school pupil at the close of the elementary school career and in this Drogheda and Rathfriland were distinctly successful, so that well-filled Introductory Courses were thereby procured. The importance of this course was not, however, generally realized, and failure resulted, also, in certain cases, where the kind of instruction for these students was either uninteresting or not based on their educational abilities. In other respects the classification of the students was, as a rule, excellent, and creditable efforts were made to induce students to return for a third or fourth session of instruction. It is, however, worthy of special comment that, in the County Borough of Dublin, although the enrolment in some non-advanced classes was large, and although elaborate and up-to-date equipment and accommodation were provided for higher instruction, no definite classification in these non-advanced classes was undertaken, the number of advanced students was relatively very small, and the standard of efficiency was below that which could reasonably be expected.

The following figures indicate the numbers of students, in all Technical Schools in the North Central District who have taken up courses of instruction in the various years, as compared with the numbers for Session 1911-12:—

	1911-12.	1912-13.
Introductory Course, . . .	246	299
Specialised Courses:—		
First Year,	1716	1867
Second Year,	507	578
Third Year,	159	177
Fourth Year and upwards,	80	91
Total,	2,708	3,012

If these totals are compared with the total number of students in attendance at Technical Schools—5,951 in 1911-12, and approximately the same in the following session—it is noteworthy that less than fifty per cent. follow recognised courses of instruction.

The percentage analysis of specialised course students brings out the great leakage which takes place from year to year:—

Year of Course.	First Year.	Second Year.	Third Year.	Fourth and subsequent Years.
Percentage at each Course, 1911-12, . . .	69.7	20.5	6.5	3.3
Percentage at each Course, 1912-13, . . .	68.8	21.3	6.5	3.4

DAY TRADES PREPARATORY SCHOOLS.

Day Trades Preparatory Schools were included in the Scheme of Technical Instruction of the Urban Districts of Blackrock and Pembroke: the

curricula of these schools were based, as heretofore, on the training that a pupil leaving the day school would be expected to have acquired as a preparation for an industrial career.

Satisfactory results were achieved by both of the above schools, and this type of instruction continued to supply, though to a limited extent, a demand for the proper education of a certain type of day-school pupil.

DAY SECONDARY SCHOOLS.

Of the sixty-four schools which worked under the Department's programme, twenty-six were Girls' schools and thirty-eight Boys' schools; of the latter three admitted girls also. With the exception of the Special Fourth Year Course in Physical and Commercial Geography, all the syllabuses provided were followed by one or other of these schools, the actual distribution of courses being shown in the following table:—

Course.	First Year.	Second Year.	Third Year.	Fourth Year.
Preliminary Course, . . .	63	62	—	—
Manual Instruction, . . .	12	11	5	—
Domestic Economy, . . .	9	5	15	13
Chemistry,	—	—	35	15
Mechanics,	—	—	4	2
Physics,	—	—	7	4
Physiology and Hygiene, . .	—	—	5	3
Botany,	—	—	3	2
Physical and Commercial Geo- graphy,	—	—	7	—
Drawing,	—	—	12	3

These numbers represent only slight changes from the previous session, and indicate that the schools are now, having realised which subjects are best suited to their particular needs, rapidly assuming a more or less permanent form. Chemistry was very widely adopted in Boys' Schools; Domestic Economy and Drawing were the special courses favoured by Girls' Schools. The number of schools following the new course in Geography slightly increased, but Botany, notwithstanding its attractions somewhat declined in popularity. The continued decrease in the number of pupils following the auxiliary courses in Manual Instruction is a matter for regret in view of the marked suitability of such instruction to the majority of pupils at Day Secondary Schools for Boys.

The equipment of schools in Science and Drawing was, as a rule, satisfactory, but some schools were hampered by the tendency to work with the minimum of apparatus. It would appear to be the exception to take stock of equipment at the termination of the session, so that everything necessary may be in readiness at the commencement of the next. Larger instruments, such as microscopes in Physiology and Botany and vapour density apparatus in Chemistry, were unfortunately seldom duplicated.

The standard of efficiency in teaching has gradually risen and, while there was no preponderance of teaching of exceptional merit, there was a measurable decrease of inefficient work. The least effective instruction was generally to be found in the First Year of the Preliminary Course; this regrettable weakness had several origins, amongst which may be mentioned (1) the initial weakness of many pupils entering the course, (2) the tendency to bestow an undue proportion of time on the mensuration portion of the syllabus with the consequent partial or total neglect of the later sections, and (3) the frequency with which the least experienced

teachers were allocated to these classes in which firm foundations should be laid. The instruction given in the second year of the Preliminary Course showed a notable improvement on the First Year, and generally this subject was treated with marked success. While the work in the special courses was, as a rule, of considerable merit, and the product of uniformly diligent teaching, progress in the Geography Courses was definitely impeded by the low average ability of the pupils selected, and in the Physiology and Hygiene Courses both the spirit of observational and experimental study, and also the application of the subject to hygiene and human life, were frequently sacrificed to examination demands.

DAY PRIMARY SCHOOLS.

The number of schools earning grants for Drawing remained at twenty-three, and of these eight made provision for the teaching of Manual Instruction.

The quality of the instruction in Drawing was, as before very good, and can make no clear advance in standard till the average number of pupils under one teacher is considerably lessened.

Manual Instruction was taught with success in the limited number of schools by which it was adopted.

SHORT COURSES FOR TEACHERS.

Short courses for teachers were held in July at the following centres—Blackrock Dominican Convent (Domestic Economy), Navan Loreto Convent (Domestic Economy), Bellbriggan Loreto Convent (Physiology and Hygiene), Marino Training College (Art). Definite courses of a limited scope were in operation at each centre, and in all cases the efficiency of instruction was of a high order of merit.

SUMMARY OF ART INSPECTORS' REPORTS:—

PRIMARY SCHOOLS.

During the past session instruction in Elementary Drawing was conducted in 97 schools receiving grants in respect of this subject under the Department's regulations.

In the annexed table is shown the number of schools in each province classified as Non-residential Schools and Residential Schools.

	Non-residential Schools.	Residential Schools.
Leinster, . . .	34	5
Munster, . . .	34	5
Ulster, . . .	8	4
Connaught, . .	2	2

The programme, as heretofore, provided for instruction in seven standards. In the Day Schools it is unusual to find the work carried beyond Standard V.; this is due to the fact that the majority of these schools include departments for Secondary education in which provision for further instruction in Drawing is made, while certain of the schools are situated in extremely poor districts where pupils do not proceed beyond Standard IV. or V.

In the Residential Schools, which are largely of an industrial type, the instruction in Drawing is generally continued into Standards VI. and VII. Under the circumstances, therefore, it is not surprising to find the work in the Residential Schools, as a rule, superior to that in the Non-residential Schools, since the pupils not only remain longer, but are under the control and guidance of the teachers during their entire school life. Notwithstanding the small

amount of time devoted to Drawing, the large size of the classes in most of the schools, concurrent instruction in several standards, unsuitable equipment, and frequent changes of teachers, the subject has been in general conscientiously taught, and, under the circumstances, the quality of the work produced has been creditable to both teachers and pupils.

In the details of the work, practice in free drawing from the fist has been very satisfactorily performed in all Standards; mechanical drawing in Standards I, II, III, and IV has been good, and shows definite and continued improvement; in a small number of schools drawing boards and T squares are now being used for this subject with considerable advantage. In Standards V. to VII. the instruction in Plane and Solid Geometry has been somewhat indifferently presented, while object drawing, although slightly improved, still suffers through inadequate and unsuitable accommodation, the lack of schemes of instruction, and of interesting objects as examples.

Although slates are still in evidence in a few schools in Standards I. and II., they are gradually being discarded for drawing purposes in favour of the more suitable medium of paper.

Satisfactory progress in the teaching of Drawing in connection with Manual Instruction has been made in the very few schools which took this subject. It is to be regretted that Manual Instruction is not more generally taught in these schools, as its educational value, especially to pupils who do not go beyond the Primary School, can hardly be over-estimated.

SECONDARY SCHOOLS.

It is a pleasure to again record continued progress in the instruction in Drawing in Day Secondary Schools during the past year, an increase in efficiency due largely to the more thorough consideration of the course as a whole, to more adequate preparation of the lessons, and to a truer conception of the aim and possibilities of the subject. Many more teachers have adopted their own schemes of exercises, and have thereby secured greater fitness and imparted a personal interest to the work, while revision of schemes in the light of experience gained has made the instruction more systematic and educationally sound.

Certain obvious defects referred to in reports from year to year are being slowly remedied; these defects are chiefly deficiencies of equipment, unsuitable desk accommodation, insufficiency of interesting objects as drawing examples, and lack of drawing boards and T squares. During the past session in a few schools, the classes in Drawing have been transferred to rooms not previously fitted with desk accommodation and, in all cases, single desks have been provided, while in some schools obsolete long desks have been dispensed with in favour of the more convenient single or dual forms, indeed, it is now fully recognised by managers that the teacher of drawing, no matter how efficient, is placed under serious disadvantages in dealing with his subject, where the pupils are unable to obtain an undisturbed view of the example.

The insufficiency of objects is a defect more easily remedied, and greater attention has consequently been possible in this direction: several teachers have gathered together a collection of excellent objects at a trifling cost, and have thereby invariably enhanced the value of the instruction, and secured greater interest among the pupils. The choice of objects seems to be decided by their affinity to typical geometric forms rather than by any inherent beauty which they may possess, and teachers have not fully grasped the opportunity for inculcating an appreciation for beautiful forms through the objects selected as drawing examples. Moreover, very little attention has been given to good simple decoration of classrooms, or to the provision of artistic examples to furnish the walls.

The lack of drawing boards and T squares affects the instruction and practice in geometrical drawing particularly, and the work in this section does not share in the general improvement of the drawing as a whole. There are, as may be expected, instances where very capable instruction

is given; on the other hand, there are a greater number of instances where the teaching is extremely weak, and, viewed as a whole, the instruction in geometrical drawing is still unsatisfactory. This is due to the impractical character of the manipulative teaching, and to the methods of presenting the subject through a series of text book problems with inadequate consideration of the principles of geometric construction involved in them; execution without analysis; practice rather than comprehension. The teachers rely on text books on geometrical drawing, and are evidently of opinion that they cannot improve upon them, whereas far more successful work has been done by teachers who have prepared their own courses of instruction to suit the existing conditions of the schools in which they teach.

The teaching of Object Drawing continues to improve. In the presentation of this subject it is interesting to note a more pronounced tendency to regard the power of drawing as a function of the visual and mental faculties, and not solely as the outcome of an acquired knowledge of a series of rules and constructions: drawing from memory, to a large extent, has helped to demonstrate the value of this aspect of drawing instruction, although memory practice itself is still on a somewhat undefined basis.

A further general improvement is due to the fact that the majority of teachers of drawing make much more use of the blackboard for demonstration purposes, almost invariably explain the subject of the lesson and indicate possible procedure before actual drawing begins, and are not now content to place the examples before the class and proceed to the correction of individual faults, without the stimulus and instructiveness of general directions.

The Special course in Drawing, Third Year, was conducted in 68 schools, and in Fourth Year in 33 schools. While the syllabus allows considerable latitude in the choice of work for the Special Courses, the schemes most usually adopted included Object Drawing, Design, and Geometry. In Object Drawing the work produced has been uniformly good and has been conducted on efficient and interesting lines.

The teaching of Geometry has been unfavourably influenced by deficiencies referred to above, and, in Solid Geometry has been further affected by the neglect of notation.

Interesting work in Design has been produced in many schools, and very commendable efforts have been made to deal satisfactorily with this instructive section of the programme: while some definite improvement has been secured the methods of imparting and cultivating a knowledge of ornament and design remain somewhat unformed, and there is some degree of uncertainty in presenting this subject.

Allied study from natural forms wherever practised, has generally been very good, and has now almost entirely displaced copying from meagre prints and text book examples.

DAY TRADES PREPARATORY SCHOOLS.

The instruction in Drawing in Day Trades Preparatory Schools has been very satisfactory as a whole. In almost all schools somewhat more than half the available time has been devoted to Mechanical Drawing during the First and Second Years, and in the Third Year it has been usually the only form of drawing practice.

In Mechanical Drawing the instruction has been more closely concentrated on the processes of workshop draughtsmanship, and the various sections of geometry and the preparation and use of dimensioned sketches are gradually becoming more fully combined in a comprehensive course for that purpose.

Only a few schools have obtained drawings, or sets of drawings, from professional sources, which have been used in Architectural, Engineering, Shipbuilding, Coach-building, Decorating, or other trades, and teachers do not fully realise the instructiveness of such examples to pupils who are as yet unfamiliar with the function of drawing in its wider relation

to important workshop needs. The preparation of dimensioned sketches continues to improve and faults due to negligence and a too casual sense of the importance of the subject have been largely eliminated. However, there is still room for improvement in this useful branch of drawing, as in some cases it was noted that the sketches were very rough in character, dimensions were clumsily written and often unnecessarily repeated, and suitable note books were not in general use.

Generally the type of work continues to be largely based on Engineering draughtsmanship, and as such provides a course of sound educational as well as practical value.

It is felt however, that greater efforts may with advantage be made to discover the aptitudes of the pupils, so that the instruction may be adapted to their probable requirements, whether in the Building trades, such as Painting and Decorating, Plasterers and Stone-cutters work, or in the Woodworking and Cabinet-making Trades.

DRAWING AND ART INSTRUCTION IN TECHNICAL SCHOOLS

During the past year there were 78 institutions, other than Schools of Art, in which Drawing and Art Classes were conducted under the Department's regulations for Technical Instruction. Nineteen of these were evening Technical Schools and Schools of Commerce in which classes for Introductory and Technical Drawing only were included in the curriculum; 4 were Training Colleges for teachers, and the remainder were Technical Schools in which classes for more advanced work in Drawing and Applied Art were formed, in addition to the Drawing of the Introductory Course.

The dominant note in the work of the past year is found in the increasing attention given to practicability and application and purpose in the instruction.

In many of the Art classes the effort to adapt the instruction to the demands of a large variety of trade requirements has created a fundamental change in the character of the work, while this change is manifest in the majority by a tendency to enquiry and experimentation. At the same time there are still a few classes which appear to have crystallised into a state of mere academic routine in which the teaching is dull and the work common and ineffective.

In this respect the establishment of the Department's scheme of Art Examinations which allows great freedom and a wide choice of Art subjects has been a help to the school authorities in drawing up courses of Art studies, but many of them, however, show little or no initiative in preparing courses, being content simply to transfer the Department's programme to their prospectuses as their courses of study. This hesitation was not unexpected owing to the transition period between the cessation of the preliminary Art examinations of the Board of Education, and the establishment of the examinations of the Department. Examinations in the First and Second Years' Subjects were held this session, and it is hoped that when the full scheme is in operation the schools will more generally develop each one along the lines most suitable to the particular needs of pupils, and the crafts, industries, and trades in their localities.

There are in the main three distinct types of student, other than teachers and intending teachers, who attend these classes: (a) students preparing for specialised work in other branches of Technical instruction, and who attend a course of elementary drawing for one Session; (g) students who are engaged in professions and trades and who desire to supplement office and workshop training by special study; (c) general students, or amateurs, who desire instruction and practice as a means of personal culture.

In (a) the instruction in Drawing as part of the Introductory Course has usually been successfully conducted and the development of this work into "Technical" or "Trade Drawing" is significant and interesting.

In class (b) the students most frequently met with are architects and surveyors apprentices, draughtsmen, house decorators, stone, marble, and wood carvers, plasterers, lithographic artists, designers for special industries.

workers in lace, crochet, etc., occasionally printers, cabinet-makers, and tailors.

Successful work in this section demands constant enquiry, and intelligent, sympathetic consideration on the part of the teacher, and is the most difficult of the three divisions to manage. The students attend for definite instruction applicable to their special interests, and, whether requiring a basis of general drawing practice or not, are anxious to pursue particular methods and processes in touch with their daily work. In the unprogressive classes this is the weak side, and the direction in which development is most urgently needed. There is also an important and growing aspect of the instruction in which artistic handicrafts are utilised in connection with drawing and design. The handicrafts practised are metal work and enamelling, lace, crochet, and embroidery, wood carving and occasionally wood inlay, leather work and a few minor processes such as stencilling and simple block printing. These handicrafts are primarily intended to convey a knowledge of appropriate ornament, and to cultivate a feeling for artistic workmanship, and have been of considerable assistance in these respects.

In reference to class (c) it seems necessary to emphasise the desirability of encouraging the general or non-industrial student, who is frequently the buyer of work and the employer of the professional worker, and of affording facilities for the cultivation of correct judgment and good taste in ordinary decoration as well as in the more subtle qualities of pictorial art. Students in this section, in addition to drawing, and such instruction in painting as the schools afford, practise some particular handicraft, and, as a rule, are assiduous and hard working students.

Instruction to teachers, and intending teachers, is also provided in these classes and the nature of the instruction is largely determined by the qualifications in view.

In the Training Colleges useful Courses in Drawing and Modelling have been continued throughout the session, while special summer courses in a few districts have provided facilities for additional instruction to teachers engaged in Primary and Secondary School work. While the general instruction in connection with the training of teachers is carefully performed it is felt that too little attention has been given to the business of teaching and teaching methods apart from individual accomplishment.

SCHOOLS OF ART.

The provincial Schools of Art at Belfast, Cork, Limerick, Londonderry, and Waterford have generally maintained their relative positions in point of efficiency. The group of schools considered as a whole showed decided general improvement, which is indicated by an awakened spirit and appreciation of the problem of technical education, and the possibilities of the Art School in relation thereto, and greater activity and enquiry have been manifest throughout the past year.

In the National Competition, in which 270 schools and Art classes of the Kingdom competed, the students of the Irish Schools of Art, including the Metropolitan School, submitted 379 works for competition, and were again most successful. A total of 83 awards was gained as compared with 54 last year, although the number of works submitted was smaller. This shows that the Irish students who attend regularly and work seriously can very successfully compete with the students of other schools, and their continued success in this competition reflects considerable credit on both teachers and students.

The awards included one National Gold Medal, four National Silver Medals, nine National Bronze Medals and eleven National Book prizes. The subjects for which the awards were made covered a large field including designs for Lace, Crochet, Embroidery, Damask, Stained Glass, Wood-carving, and Book-illustration. In most of these crafts actual specimens executed in material were submitted with the designs. In addition awards were made in the following General Art Subjects, viz., Painting and

Modelling the Human Figure from Life, Painting and Modelling Heads from Life, Painting Still Life in Oils and Water Colour, Studies from Nature for the purpose of Design, Historic Studies of Ornament, etc.

The work of the schools is now less generally controlled by formal examinations which were somewhat out of touch with actual developments; there are also fewer fresh openings for Art teachers as the work throughout the country becomes more settled and consequently less attention is given to specialised study solely for teachers' qualifications. It is, therefore, possible to form a more accurate estimate of the work of the Schools of Art in its bearing upon practical conditions and requirements of every day life, and freed from unessentials which were common to all, the different characteristics of the several schools appear in greater prominence. These characteristics are so varied that it seems desirable to briefly consider each school separately.

The School of Art, Belfast, is a Department of the Municipal Technical Institute, and is in direct connection with certain sections of the Textile work, although the connection is not always perfectly established, and in relation to other sections of possible development is not yet effected. The larger local industries in which artistic influence is essential are damask manufacture and white embroidery, and much excellent instruction in design for these trades has been provided in special classes. Special instruction in handicraft is also given, chiefly in coloured embroidery, stained glass, writing and illuminating, and to a less extent in metal work, enamelling and wood carving. The School comprises good Painting and Modelling sections, while the instruction in Architecture has been entirely re-organised during the past session.

The School of Art, Cork, is the only one of the five schools which is housed in separate premises, and, since the opening of the new Municipal Technical Institute now assumes possession of the entire accommodation in a building which formerly contained the Free Library in addition to the technological classes working under the scheme. The School has an industrial department for the production of Lace, and Crochet, and has a wide reputation for excellence in these fine crafts; the designs are prepared in the School of Art, and the character of this work is of a high standard and is now probably the best of its kind in these islands. The modelling section of the school is conducted with conspicuous energy, and contains sub-sections for stone and marble carving, and wood-carving. There are also classes for metal work, enamelling, and embroidery.

In Limerick exigencies of space in the new premises of the Municipal Technical School have caused an unfortunate separation between the Art classes and the Craft classes, which latter continue to be held in premises at some distance from the Technical School. The re-organisation of the staff some two years ago has been a favouring circumstance for development, although there is still some degree of inertia in the work, and the situation is as yet but incompletely grasped. The handicraft classes of this school have been well conducted, and include stone and wood carving, stained glass, pottery, and tapestry.

At Londonderry School of Art, good general art work had been done, but within narrow lines, and the addition of handicraft work, in recent years, while an undoubted advantage in itself, served to accentuate the limitations of the general preliminary instruction. During the past year the entire organisation has been re-considered, manifest improvements have been made, and the School is now on a satisfactory working basis.

The situation in Waterford remains unchanged, efforts to re-establish the instruction on effective lines have not been successful, and the School of Art, as such, affords scope for development.

The number of students in attendance at these Schools, leaves much to be desired, the total number attending the schools at Londonderry and Waterford is small, and the number attending the Day Classes at Limerick and Cork is also small. When it is borne in mind that fairly large numbers of talented pupils are met with in Primary and Secondary Schools this is difficult to understand, and shows that much remains to be done, especially

in attracting general Art students in order to create an appreciative public, which can discriminate between good and bad art work, and without which few art workers can hope to succeed.

With this in view, it may be stated that there is little teaching of the history and principles of good ornament, and very few lectures or lessons which would lead to the desired result.

Generally, architectural instruction for the professional student and the study of architecture by the general art student has not yet received adequate consideration and correlated work in interior decoration, furniture design, modelled decoration, and other forms of artistic work affected by architectural precedents, are unfavourably limited thereby. The literature of Art, apart from text books on Art subjects, is now more widely considered in some schools, but as a rule, the importance of intelligent reading in this respect is not made manifest, nor are students sufficiently informed of the type and progress of Art work in other countries.

MISS LOUGH (*Domestic Economy Inspector*), dealing generally with the Northern District, reports :—

COUNTY SCHOOLS.

The work under this section has not presented any new features during the session. The short courses of instruction continue to be well attended and good work is done at them. In some instances there has been difficulty in securing suitable accommodation, but in most cases the difficulties have been overcome and the classes have been conducted under satisfactory conditions. Economy and utility still receive primary attention, and efforts are made to have the work such as will permanently benefit students.

URBAN SCHOOLS.

The arrangement of the classes in Technical Schools has improved and concurrent instruction is not now so general. This will add considerably to the efficiency of the instruction. The adoption of the Specialized Course System gives very good results in the cases of those qualified to enter these classes but it is desirable that in every school a class should be formed for those who either from defective education or other causes are ineligible for a course class. Good accommodation and suitable equipment are now universally provided. Much improvement is seen in order and neatness generally.

SECONDARY SCHOOLS.

Good work is accomplished in these schools. The instruction is carefully arranged and systematically carried out. Practical Laundry Work now forms a part of the Fourth Year's Course so that pupils are trained in all branches of Household Knowledge. Special improvement was noted in the quality of the Needlework during the past session. Care is taken that pupils are trained in habits of economy and order, household accounts receiving special attention. Auxiliary courses are conducted in the majority of secondary schools so that the work of the Third and Fourth Year students is of a much more efficient type than formerly.

MISS BEVERIDGE (*Domestic Economy Inspector*), dealing generally with Schools in the Southern District, reports :—

TECHNICAL SCHOOLS.

Steady improvement is still in evidence in the treatment of Domestic Economy subjects, and the Syllabuses followed are of a satisfactory type being sufficiently comprehensive for students' needs. It is found however that the training in Housewifery Classes, whilst conducted on good lines

and at times under considerable difficulties, is not sufficiently thorough where "model" living rooms cannot be provided to demonstrate the essential principles of keeping house.

More time and forethought is now devoted to preparation of class-work, and the economy of material receives due consideration.

Specialised courses in Domestic Economy were on the whole well attended, and a wholesome interest was displayed in the work, but even though the advantages of such systematised courses are obvious, it should not be lost sight of, that the number of students who are unable to profit by the scheme through lack of good general education or on account of home-duties, is large and hence such students should be encouraged to attend a class in even one section of domestic work, one day per week.

ITINERANT COURSES UNDER COUNTY SCHEMES.

Though mainly elementary in character, the instruction given is of an excellent type, considering the difficulties and conditions under which the majority of courses are held.

The popularity of, and good attendance at, these courses is as much in evidence as heretofore, and greater effort is now made by County Committees to provide suitable accommodation in rural districts. Again it may be mentioned, the many advantages to be derived by the formation before a course commences, of a small rural Committee, the members of which could materially assist in procuring and encouraging constant attendance, as well as aid the Instructress in acquiring speedily a knowledge of local needs and industries, and secure for her the type of scholar likely to benefit by the instruction. Unfortunately, however, such help is not sought to any extent, and too much organisation falls to the lot of many Instructresses whose knowledge of rural life is extremely limited.

The necessity of teaching students how to regulate expenditure of income and keep simple Household Accounts is of the utmost importance and calls for still greater consideration in the courses of instruction.

RESIDENTIAL SCHOOLS.

The instruction has been generally conducted on sound lines, but the study on "homely" lines of Domestic Hygiene and Home nursing demands more attention, and in particular the care and management of children. This branch is one of the most essential sections of a Residential School course, as we have in these schools girls of an age capable of realising the importance of the subject. Also the making of simple home remedies, i.e., poultices, fomentations, etc., should receive constant practice until students display that briskness in carrying out the processes which serve to make the remedy have the desired effect.

SECONDARY SCHOOLS.

The standard of work remains about the same as during the previous year, but more effort was made towards thorough organisation, and a fuller programme was attempted in many schools. The teaching of Laundry-work has now been introduced in "Fourth Year Special Courses" in all schools in the Southern district, with very fair success. Better effort was made during the past session to adapt the teaching to the home needs of pupils, but this matter is nowadays a difficulty in Secondary Schools owing to the mixed type of scholars found therein. Domestic Economy class-rooms, with few exceptions, are excellently equipped and cared. More originality might be displayed in the treatment of Needlework classes; apart from the mere teaching of stitchery, with a well organised programme, the teacher has scope for individuality and should recognise that a certain amount of character and artistic training can be developed.

The demand by parents for Domestic Economy training has led to full recognition of this subject, and schools show more willingness latterly to devote a larger share of time to this teaching.

MISS ANDERSON (*Inspector of Home Industries*), reports :—

HOME INDUSTRIES CLASSES.

The number of centres remains practically unchanged. Certain classes, which showed no likelihood of development into successful industries, have been closed; but this loss has been counterbalanced by the opening of new centres.

In the early part of the session business was generally slack in all branches of work; but as the season advanced, a decided improvement took place in the Sprigging Industry; and there was a revived demand for the lighter kinds of lace, such as Linerick, Carrickmacross, and Needlepoint. These industries are working prosperously at the present time, and their future appears hopeful.

Unfortunately the slackness in the Crochet industry continued throughout the Session, to the serious loss of many poorer districts. In the words of a country worker, "The failure of the crochet was as bad for us as the cattle disease itself"—and the reduced earnings gave an impetus to emigration.

CAUSE OF THE DEPRESSION IN THE CROCHET INDUSTRY.

The depression in the crochet industry is chiefly due to foreign competition, too often of a fraudulent character. It is well known that Irish motifs are largely used in foreign crochet centres, and there is abundant evidence to show that the foreign product is frequently advertised and offered for sale as "Irish Crochet." This practice obtains on the Continent and in America.

The rapid increase in the Crochet Industry abroad, both on the Continent and in the East, has consequently resulted in a glut in the market for "Irish Crochet."

The remedy for the depression consists in increased attention to the technique of our work—with judicious variation of traditional patterns—and the adoption of a National Trade Mark, as the most effectual safeguard for our Irish Crochet Industry in the markets of the world.

It need hardly be stated that the depression has been widespread, and that its effects have not been confined to the Crochet centres that are working under County Schemes. While the depression has been general, its effects have been felt in varying degrees throughout the country. Centres that have established a name for good work and sound business methods, have generally suffered less than others; and it was satisfactory to find that orders had only been temporarily suspended, and not withdrawn, from many of these classes. Though business is still slack, it is encouraging to note that there are indications of a revival in the future.

SPRINGING.

Business was slack in the early part of the session, but a considerable revival took place later in the year.

Apart from private orders which are often of a miscellaneous character, work may be divided into three main groups, namely, Household Linen, Handkerchief Work, and Blouse Embroidery.

The industry has been worked with varying degrees of success. Special mention may be made of the centres in West Fermanagh, and of certain districts in Co. Donegal, notably of Glenties, for sound work executed during the past session.

The increasing use of the Embroidery machine has caused a further withdrawal of the cheaper grades of work from country districts, such work is now generally executed in the factory and not in the home. There is an evident tendency towards the restriction of hand-embroidery to the higher classes of goods. An advance in embroiderers' wages during the past session may be noted.

Some skilful reproductions of old embroidery formed an interesting feature at some of the Ulster Shows. The work was applied to fichus, collar-ettes, and babies' robes, and it suggested possibilities of further development.

The recent revival of Raised Limerick Lace also opens up a new field for the expert embroiderer. This variety of lace embroidery is especially adapted to country districts, and it appears capable of much development in the hands of a skilled worker.

PLAIN NEEDLEWORK.

Under competent management, classes for Domestic Needlework fulfil a very useful purpose; and good work has been accomplished in various centres during the past session, notably at Kilrush and Newcastle West, where the instruction is very sound and practical. In some centres, however, there is a tendency to let the course drift into more fancy-work towards the end of the session. This is undesirable, and an endeavour has been made to ensure that instruction should be given on progressive lines, and that thorough training in the elementary stages of domestic sewing should be followed by careful instruction in the finer branches of plain needlework, special attention being directed to such points as proportion, fitting and finish, thus giving a sounder course of instruction both from an educational and practical standpoint.

The organisation of Plain Needlework as an Industrial Subject may also be suggested. Repeated enquiries regarding centres where fine hand-sewn underclothing is produced in Ireland, indicate that there is room for extension in the fine lingerie industry.

It has been stated that orders for trousseaux, etc., are frequently sent abroad, owing to the insufficient number of trained sewers in this country who would be competent to undertake such work.

With systematic training of the workers, and sound organisation of the industry on business lines, it should be possible to retain such orders in Ireland.

MACHINE KNITTING.

Good work has been produced in the larger centres, such as Limerick and Longford; but no extension of the industry has taken place during the past session.

TRAINING SCHOOL, ENNISKILLEN.

The School has continued its valuable work in the training of teachers of crochet work and spinning.

The admission of Carrickmacross Lace-makers for instruction in Drawing, Commercial English, and Business Methods, marks a new departure and indicates an extension in the influence of the School beyond its earlier limits.

PREMISES.

The question of premises has an important influence on the successful working of Industries Classes. When no accommodation is available save in the local National School, day classes can only be held on Saturdays night classes being the rule for the rest of the week. This is a serious handicap.

The provision of suitable premises, available in the daytime, should not be an insoluble problem in the few districts where night classes are still held.

THE TRAINING OF TEACHERS.

The summer courses of instruction to teachers, held in July and August, provided for instruction in experimental science (physics, chemistry, botany, and physical and commercial geography), drawing and modelling. Advanced cookery, hygiene and sick nursing, manual instruction (woodwork), manual instruction (metalwork), practical mathematics and mechanics, handrailing, office routine and business methods, and rural science (including school gardening). A special course of instruction for teachers of lace-making, crochet-work, embroidery and sprigging was also held.

The institutions at which the courses were conducted were:—The Royal College of Science, Dublin; the Metropolitan School of Art, Dublin; the Irish Training School of Domestic Economy, Stillorgan, Co. Dublin; the Department's "Industrial Annex," Dublin; the Municipal Technical School and School Garden, Kingstown; and the Albert Agricultural College, Glasnevin.

The courses were attended by 432 teacher-students, and the instructors engaged numbered 66. The following were the staffs engaged for the various courses:—

For Experimental Science:—Professor W. Brown, B.Sc., M.I.R.E.; Professor G. A. J. Cole, F.G.S.; Professor T. Johnson, D.Sc., F.L.S.; Professor G. T. Morgan, M.A., D.Sc.; Professor I. Swain, B.A., A.R.C.S.C.I.; Messrs. J. Adams, M.A.; R. G. Allen, B.Sc., A.R.C.S.C.I., A.I.R.E.; T. A. W. Hill, B.Sc.; J. H. Pollok, D.Sc.; G. A. Watson, A.R.C.S.C.I., F.C.S.; A. Williamson, M.A.; J. H. Cooke, A.R.C.S.C.I.; A. L. Fletcher, M.A., B.E.; J. Griffiths, B.Sc.; W. D. Haigh, B.A., A.R.C.S.C.I.; A. G. G. Leonard, B.Sc., Ph.D., A.R.C.S.C.I.; W. J. Lyons, B.A., A.R.C.S.C. (Lond.); R. V. Manning, A.R.C.S.C.I.; H. W. Moss, A.R.C.S.C.I.; H. Norminton, M.Sc.; H. R. Norton, M.Sc.; F. Rawson, A.R.C.S.C. (Lond.); J. Reilly, B.A., M.Sc., A.R.C.S.C.I.; Misses B. McL. Blair, A.R.C.S.C.I.; A. Hemphill, A.R.C.S.C.I.

For Drawing and Modelling, and Art Metalwork and Enamelling:—Mr. J. Ward, A.R.C.A. (Lond.); Messrs. P. O. Reeves, A.R.C.A.; H. Clarke; J. S. Keatinge; F. Luke, A.R.C.A. (Lond.); G. G. Lynes; O. Sheppard, R.H.A.; F. Wiles; Mrs. D. Barden; Misses M. Criley; U. Duncan; E. Emerson; A. Jacob.

For Advanced Cookery:—Misses E. A. Heptinstall; M. Darling.

For Hygiene and Sick Nursing:—Misses L. A. Baker, M.B., B.S.; E. Hewitt, B.A., M.B.; M. Murphy.

For Manual Instruction (Woodwork and Metalwork), Handrailing, and Practical Mathematics and Mechanics:—Messrs. H. O. Armstrong; W. Davidson; J. G. Edwards, A.M.I.M.E.; P. F. Gillies, B.Sc.; W. B. Jamison; F. W. Warwick, B.A., B.E., A.R.C.S.C.I.

For Office Routine and Business Methods :—Messrs. E. Daly ; W. Scott ; J. McCullough.

For Rural Science (including School Gardening) :—Professor G. H. Carpenter, B.Sc. ; Professor G. A. J. Cole, F.G.S. ; Professor I. Swain, B.A., A.R.C.Sc.I. ; Messrs. D. Houston, F.L.S. ; D. L. Murphy, A.R.C.Sc.I. ; P. O'Connor, A.R.C.Sc.I. ; R. N. Sheridan, A.R.C.Sc.I. ; R. L. Valentine, A.R.C.Sc.I. ; Misses H. Laird, B.A. ; M. C. McDowell, A.R.C.Sc.I.

For Limerick Lacemaking, Crochet Work, Embroidery, and Sprigging :—Mr. H. Houchen, A.R.C.A. (Lond.) ; Mrs. K. Breton ; Mrs. M. McMenamin ; Misses A. McMenamin ; S. A. Reynolds.

The number of teachers admitted to the various courses is shown in the following table :—

	Number of Teachers who attended the Courses.
Second Year Syllabus of the Preliminary Course of Experimental Science	40
Special Course in Physics (Fourth Year Syllabus— Course B.)	11
Special Course in Chemistry (Third Year Syllabus)	23
Special Course in Chemistry (Fourth Year Syllabus)	34
Special Course in Botany (Third Year Syllabus)	7
Special Course in Physical and Commercial Geography (Third Year Syllabus)	18
Special Course in Physical and Commercial Geography (Fourth Year Syllabus)	14
Manual Training, Woodwork (First Year Syllabus)	14
Manual Training, Woodwork (Second Year Syllabus)	6
Manual Training (Metalwork)	8
Advanced Cookery	15
Hygiene and Sick Nursing (First Year Syllabus)	15
Hygiene and Sick Nursing (Second Year Syllabus)	7
Office Routine and Business Methods (First Year Course)	11
Office Routine and Business Methods (Second Year Course)	8
Drawing and Modelling	73
Art Metalwork and Enamelling	6
Practical Mathematics and Mechanics	19
Handrailing	9
Lacemaking, Crochet Work, Embroidery and Sprigging	40
Rural Science, including School Gardening (First Year Syllabus)	29
Rural Science, including School Gardening (Second Year Syllabus)	25
TOTALS,	432

Provision is made at the Royal College of Science for the training of teachers of Science, special groups of subjects being arranged for students who propose to become teachers of SCIENCE AND ART. in Day Secondary and Technical Schools. Teacherships-in-training, tenable at the Royal College of Science and the Metropolitan School of Art,

are offered for competition amongst science and art students. Particulars of the competition will be found at pages [184] and [189] of the Appendices.

The Department have made provision for a supply of teachers of commercial subjects who will be capable of giving instruction in some of the higher branches. Four scholarships were awarded in 1904, two in 1905, six in 1906, three in 1907, eight in 1910, and five in 1912. Twenty-three scholars have completed a two years' course of training at the London School of Economics and Political Science (University of London), and have been engaged in teaching in the country under the Department's schemes: of these, however, six are now otherwise employed. Four scholars are at present attending the London School of Economics.

Owing to the demand for the services of Manual Instructors the Department have made arrangements for a fifth special course of training. An Examination was held on the 21st June, 1918, at Dublin, Belfast, Cork, and Galway, for the purpose of selecting sixteen students to undergo an eight months' course of instruction. The course is being conducted by Mr. F. W. Sinclair, the Department's Organising Manual Instructor, assisted by Mr. Andreas Lang. It opened on the 2nd September, and is being held at the Department's Industrial Annexe, Grand Canal Bank, near Harcourt Terrace, Dublin. The students whilst under training receive a maintenance allowance at the rate of 30s. per week, in lieu of wages.

In order to provide for the further training of Instructors already qualified, otherwise than by means of Summer Courses, facilities have been offered to enable Instructors to attend special Saturday Classes, at convenient centres. Classes in Structural Engineering and Workshop Practice were held at the Crawford Municipal Technical Institute, Cork, during the past session, and were attended by nine and eight Instructors respectively.

The training of teachers of Domestic Economy subjects is carried on at the Irish Training School of Domestic Economy, St. Kevin's Park, Kilmacud, Stillorgan, Co. Dublin. The course of training extends over two years, but only those students are selected therefor who have most satisfactorily followed the course in Household Management, which extends over one year.

A report of the School for the session is printed at page 145, from which it will be seen that, during the session, five students secured the Department's Diploma as Domestic Economy Instructresses.

Classes for the training of National School Teachers in ELEMENTARY EXPERIMENTAL SCIENCE were conducted in the Technical Schools at NATIONAL SCHOOL Ballymena, Belfast, Cookstown, Galway, TEACHERS. Larne, Omagh, and Sligo.

The following table shows the number of such classes which have been held, and the number of teacher-students examined :—

SESSION.	No. of Centres.	No. of Teachers presented for examination.	No. of Teachers who received Certificates of satisfactory attendance and progress.			
			First Year Course.	Second Year Course.	Third Year Course (Rural Economy).	Total.
1903-4.	7	53	31	—	—	31
1904-5.	5	32	22	—	—	22
1905-6.	7	93	40	15	—	55
1906-7.	22	110	31	39	—	70
1907-8.	13	124	17	65	—	82
1908-9.	11	113	19	42	6	67
1909-10.	10	88	21	41	7	69
1910-11.	10	54	11	19	18	39
1911-12.	10	59	21	2	15	38
1912-13.	7	51	20	9	7	36

Since 1909 the Department have conducted Special Summer Courses of Instruction in RURAL SCIENCE (INCLUDING SCHOOL GARDENING). These courses have been held during the month of August, and have been attended by teachers drawn from all over the country. In 1911 the Department arranged for the extension of this work by the appointment of Instructors to conduct classes, at suitable centres, throughout the school session. The following table shows the number of centres at which classes have been conducted each session, and the number of Teacher-students examined. Teachers who have satisfactorily attended courses in the Third Year Syllabus of Elementary Experimental Science (Rural Economy)—see above—are exempted from attendance at courses in the Second Year Syllabus of Rural Science (including School Gardening), and consequently may obtain the full certificate of proficiency in the

latter subject by attendance at a course in the First Year Syllabus only. Up to the present eighty-two teachers have received the full certificate of proficiency.

Session.	No. of Centres	No. of Teachers admitted to the Courses.	No. of Teachers who received Certificates of satisfactory attendance and progress.		
			First Year.	Second Year.	Total.
Aug. 1909, .	1	13	13	—	13
Aug., 1910, .	1	30	26	—	26
1911-12, .	4	64	28	31	59
1912-13, .	13	193	125	30	155
Aug., 1913, .	1	51	27	19	46

Classes for the training of National School Teachers in DOMESTIC ECONOMY were held in the following Technical Schools:—Ballymena, Banbridge, Belfast, Carlw, Dungannon, Enniskillen, Galway, Larne, Limerick, Londonderry, Lurgan, Nenagh, Newry, Omagh, Portadown, Sligo, Templemore, Tralee, Tullow, and Waterford.

The following table shows the number of such classes which have been held, and the number of teacher-students examined:—

Session.	No. of Centres.	No. of Teachers presented for examination.	No. of Teachers who received Certificates of satisfactory attendance and progress.			
			First Year Course.	Second Year Course.	Third Year Course.	Total.
1908-9, .	1	12	12	—	—	12
1909-10, .	18	422	362	5	—	367
1910-11, .	21	361	131	169	5	245
1911-12, .	22	294	91	62	26	179
1912-13, .	29	224	114	32	24	170

Special DRAWING Classes for National School Teachers were conducted in the Technical Schools in Armagh, Cork, Dundalk, Galway, Newry, Omagh, Portadown, Sligo, and Tralee.

The following table shows the number of such classes which have been held, and the number of teacher-students examined :—

Session.	No. of Centres.	No. of Teachers presented for examination.	No. of Teachers who received Certificates of satisfactory attendance and progress.			
			First Year Course.	Second Year Course.	Third Year Course.	Total.
1909-10.	3	7	1	—	—	1
1910-11.	7	92	53	—	—	53
1911-12.	7	72	33	18	—	51
1912-13.	9	183	121	11	—	132

CENTRAL INSTITUTIONS.

The Reports of the Council and the Registrar of the Royal College of Science will be found at page [254] of the Appendices, and the Report of the Head Master of the Metropolitan School of Art, at page [269] (See also pages 12 and 13 of this Report.)

The School re-opened on the 6th August, with twenty-nine students. Of these, eleven were students whose names remained on the School Roll at the close of the previous session. The remaining eighteen were new students, seventeen of whom were admitted to the Course in Household Management, and one, having already successfully worked through the course for teachers of Rural Economy at the Munster Institute, Cork, to the Training Course for Teachers. Of these eighteen new students, six were admitted as a result of the Entrance Examination held on the 29th May, 1912, while the remainder were admitted without examination, having already passed in the Senior Grade of the Intermediate Education Board's Examinations, or having otherwise satisfied the Department that they had attained an equivalent standard of education.

At the close of the session certificates were awarded to the seventeen students who had completed the Household Management Course, and thirteen of these were selected for training as teachers.

Of the twelve teachers-in-training who attended the School during the session, five obtained the Diploma of the School, and seven remained on the School Roll at the close of the session. One of the teachers-in-training during the session 1911-12 did not return to the School.

The following classes for extern students were held during the session in order, primarily, to provide facilities for teaching practice for the teachers-in-training.

Children's Class in	Cookery	attended by	14	students.
" " "	Laundrywork	" " "	14	"
" " "	Housewifery	" " "	19	"
" " "	Home Sewing	" " "	14	"

Thirty-five pupils attended the Killarney School of Housewifery during the Academic Year, 1912-13. Of these twenty-one finished their training and were placed in situations with wages ranging from £14 to £18 per annum. Of the remaining fourteen pupils, nine, whose term of training had not been completed, remained on the School books at the close of the session. Five returned to their homes, two through ill-health, and three who were in training specially for their own homes.

SCHOLARSHIPS.

The following Scholarships were awarded during the year :—

- (1.) Scholarships for Boys.
- (2.) Scholarships at Residential Schools of Domestic Training.
- (3.) Local Exhibitions.
- (4.) Science and Technological Scholarships, and Teacherships-in-Training at the Royal College of Science (Senior Science Scholarships).
- (5.) Teacherships-in-Training at the Metropolitan School of Art (Senior Art Scholarships).
- (6.) Commercial Scholarships.
- (7.) Crochet-work and Sprigging Scholarships.
- (8.) Scholarships in Manual Training (Woodwork).

An examination in connection with the revised Scheme of Scholarships for Boys (see Appendices to Twelfth Annual Report, page [148]) was held on the 5th June, 1913, and was attended by 114 candidates. A supplementary examination was held on the 21st August, 1913, for candidates in Counties Down and Donegal, the Committees of these counties not having been able to take advantage of the former examination. This later examination was attended by 36 candidates. As a result of these examinations 34 Scholarships were awarded, of which 31 were Technical Scholarships and 3 Apprenticeship Scholarships.

Of the 14 Third Year Scholarships held under the conditions of the old scheme during the Session 1912-13, 3 were renewed for a fourth year.

Of the 46 Technical Scholarships held during the Session 1912-13, 10 were renewed as Second Year Scholarships and one as a Third Year Scholarship. Apprenticeship Scholarships were awarded to holders of twenty-three of the remaining Scholarships, the other twelve being, for various reasons, determined.

Arrangements have so far been made for the apprenticeship of fourteen of the twenty-six boys to whom new Apprenticeship Scholarships have been awarded, making a total of twenty-four boys already placed under this Scheme.

The following table shows the number of Scholarships, awarded by the various Committees, at present being held:—

COUNTIES.	New Scheme.				Old Scheme.	Total.
	Technical Scholarships.			Apprenticeship Scholarships.		
	First Year.	Second Year.	Third Year.			
Co. Clare,	4	—	—	2	—	6
Co. Down,	11	6	1	3	—	21
Co. Galway,	7	1	—	10	3	21
Co. Leitrim,	2	1	—	—	—	3
Co. Limerick,	—	—	—	7	—	7
Co. Longford	3	1	—	2	—	6
Co. Mayo,	1	—	—	1	—	2
Co. Sligo,	2	—	—	4	—	6
Tipperary (Urban and Rural Districts)	—	—	—	3	—	3
Co. Tipperary (N.R.)	—	—	—	1	—	1
Co. Tipperary (S.R.)	—	—	—	2	—	2
Co. Waterford,	1	1	—	1	—	3
	31	10	1	36	3	81

In addition to the Scholarships awarded under the Scheme mentioned above, 351 Scholarships were awarded in 1913 by the Managers of Day Trades Preparatory Schools. These Scholarships, as a rule, cover only tuition, or tuition and the necessary books and instruments, but 88 scholars received, in addition, sums varying from £1 to £10 as maintenance allowance or as grants towards the cost of travelling.

These Scholarships are in some cases renewed from year to year if the progress made by the scholar is satisfactory. In other cases Scholarships, other than First Year Scholar-

ships, are awarded to the pupils generally upon the results of the work of the previous session.

SCHOOL.	1st Year Scho- lars.	2nd Year Scho- lars.	3rd Year Scho- lars.	Totals.
Ballymena Day Trades Preparatory School	11	5	—	16
Belfast Christian Brothers' Day Trades Preparatory School	24	28	19	71
Belfast Municipal Day Trades Preparatory School	17	26	6	49
Blackrock Day Trades Preparatory School	6	5	3	14
Clonmel Day Trades Preparatory School	9	7	—	16
Cork Christian Brothers' Day Trades Pre- paratory School	10	3	3	16
Dundalk Day Trades Preparatory School	8	—	—	8
Kilkenny Day Trades Preparatory School	9	5	3	17
Londonderry Day Trades Preparatory School	12	5	3	20
Portadown Day Trades Preparatory School	14	9	6	29
Queenstown Day Trades Preparatory School	6	1	—	7
Ringsend: Pembroke Day Trades Pre- paratory School	20	18	9	47
Sligo Day Trades Preparatory School	4	5	1	10
Tralee Day Trades Preparatory School	11	—	—	11
Waterford Day Trades Preparatory School	9	11	—	20
TOTALS.	170	128	53	351

Scholarships at Residential Schools of Domestic Training, of the value of £15 each, are awarded to a limited number of girls to enable them to attend for one year a regular course of instruction and training in Domestic ECONOMY, such as will cultivate their intelligence and resourcefulness, and render them more practical in the performance of home duties. The Scholarship, together with the payment of a fee of £2 on the part of the Scholar, entitles the holder to board, residence, and instruction during the term of the Scholarship. Further particulars of the conditions under which the Scholarships are awarded, and the course of instruction which the scholars undergo, are set forth in the County Scholarship Scheme at page [175] of the Appendices.

The number of Scholarships awarded in 1913 by each Committee adopting the scheme was as follows:—

County Carlow, 10; County Clare, 6; Queen's County, 12; Tipperary Urban and Rural Districts, 1; County Tipperary (South Riding), 8; County Waterford, 3; County Westmeath, 31; County Wexford, 7.

The scholars are distributed between the various approved Residential Schools of Domestic Training as follows:—

Carrick-on-Suir, Convent of Mercy	..	8
Dundrum: Presentation Convent	..	8
Kilmore: Convent of St. John of God	..	17
Moate: Convent of Mercy	..	13
Stradbally: Presentation Convent	..	12

Where Technical Instruction Committees establish, in connection with Technical Schools in County Boroughs or Urban Districts, for students of proved ability and ascertained need, and under the terms of a scheme approved by the Department, one or more Exhibitions of the annual value of £50, tenable at the Royal College of Science, the Metropolitan School of Art, or other approved Technical, Commercial, or Art School, the Department may make a grant in aid of the Exhibitions awarded, not exceeding half their value, provided that the Department's total contribution in this respect does not exceed £50 in respect of any one Urban District, other than a County Borough, in any one year. Candidates for these Exhibitions must be eighteen years of age; they must have been in regular employment under normal conditions in a trade, business, or industry for at least a year; they must have been in attendance at a Technical School within the administrative area of the nominating Committee for at least two complete and consecutive sessions; and they must satisfy the Department that their general education is of such a nature as to enable them to take full advantage of the course of instruction selected at the approved day school of higher education. Successful candidates must devote their whole time during the period for which the Exhibition is granted to the advancement of their studies.

Four Exhibitions were granted on the results of the examinations held in 1913, one Art and one Engineering Exhibition being awarded to students of the Municipal Technical Institute, Belfast, and two Art Exhibitions to students of the Crawford Municipal School of Art, Cork. The Commercial Exhibition awarded to a student of the Limerick Municipal Technical Institute in 1911, and the Science Exhibition awarded in the same year to a student of the Waterford Central Technical Institute, have been renewed for a third session.

At the Examination for Science and Technological Scholarships and Teacherships-in-Training, held on the 24th June, 1918, and following days, thirty-six candidates competed for the five Scholarships and five Teacherships, offered for competition by the Department and tenable at the Royal College of Science.

The conditions attached to these Scholarships and Teacherships-in-Training are given on Form S. 33 printed in the Appendices, page [186].

An Examination was held on the 24th June, 1913, and following days, for three Teacherships-in-Training at the Metropolitan School of Art. The examination was attended by eleven candidates.

The conditions under which the Teacherships-in-Training were offered for competition in 1913 are given on Form S. 2. See Appendices, page [184].

Commercial Scholarships are of the value of £100 each per annum, and are tenable for two years. The object of the Scholarships is to enable selected persons to obtain such a training as will enable them to undertake the teaching of higher commercial subjects in Ireland.

No new Scholarships have been awarded in 1913. Four of the five Scholarships awarded in 1912 were taken up in that year. The holder in one case was permitted to defer taking up the Scholarship until the Session 1913-14. One of the Scholarship holders has been permitted to take up a temporary appointment as teacher during the Session 1913-14, and the other four are attending the London School of Economics and Political Science (University of London).

The conditions under which the Scholarships were awarded are given on Form S. 194, printed in the Appendices, page [187].

The Department offered for competition in 1913 three Scholarships tenable at the Training School for Lace and Sprigging Teachers, Enniskillen. The object of the Scholarships is to enable selected applicants, who must have had a satisfactory general education, to secure training as teachers of the subjects mentioned.

Two Scholarships in Crochet-work and one in Sprigging were awarded on the results of examinations held in Dublin and Enniskillen. Further particulars respecting these Scholarships are given at page [188] of the Appendices.

The list of candidates awarded Science and Technological Scholarships and Teacherships-in-Training, Teacherships-in-Training at the Metropolitan School of Art, and Crochet-work and Sprigging Scholarships in 1913, will be found in the Appendices, page [189].

At an Examination for Scholarships in Manual Training (Woodwork) held on the 21st June, eighty-five candidates competed, and sixteen of these were selected to undergo the special course of training.

3.—FISHERIES.

The Report of the Fisheries Branch for the year 1912, which has been issued since the date of the Department's last General Report, shows that, for the year under

SEA FISHERIES. review, both as regards the quantity of fish landed and the number of men engaged in fishing, there has been a continuance of the decline referred to in the Report for the previous year. Regarding the diminution in the number of men employed it is to be said that the change which is taking place in the method of propelling fishing boats—that is from sails to motor engines—must eventuate in the establishment of a much more effective fishing fleet than heretofore. The value, at places of landing, of the total capture, excluding salmon, was estimated at £367,867. The statistics given do not include the product of the whaling industry which, at the two stations (Inishkea and Blacksod) amounted to 2,357 barrels of oil, 2½ tons of whalebone, and 2,562 bags of manure.

The mackerel fisheries, although below the general average, showed some improvement on those of the previous year, and Irish-cured mackerel obtained fair prices in the American market.

The Department continued mackerel curing operations at their experimental stations at Courtmacsherry and Crookhaven, and the manner in which they were able to dispose of their cure and the prices obtained for it in a greatly overstocked American market, should prove conclusively to Irish curers the value of curing, grading and packing on the lines advocated by the Department.

The herring fisheries, in the aggregate, showed a decline on those of the previous year, and were it not for a remarkable improvement in the East Coast catch during the summer fishery, would have been even more unsatisfactory. The total amount of herring landed during the year amounted to 473,000 cwt., valued at £130,000.

The operations of the Department's Crown Branding scheme for cured herrings were again carried on at Ardglass and Kilkeel.

The Brand was applied to 10,894 barrels, as compared with 4,614½ barrels during the previous year, and at the conclusion of the season the Department's Fishery Officer was despatched to inspect the Irish herrings on hands in the principal German ports. From his report (published in the Department's JOURNAL for January, 1913, Vol. XIII., No. 2), it was evident that the Irish branded herrings are much esteemed by Continental buyers.

GOVERNMENT
BRAND FOR
CURED HERRINGS.

The value of the kelp exported from the Counties of Clare, Galway, Mayo, Sligo, Donegal and Antrim was estimated at £18,300.

KELP.

The number of Irish vessels actually engaged in fishing during the year (some wholly and some partially) —irrespective of those engaged in salmon fishing—was 5,198. The numbers of men and boys employed were, respectively, 18,628 and 352.

**VESSELS AND
MEN ENGAGED.**

Ten fishermen during the year ended 30th September, 1912, lost their lives while actually engaged in the pursuit of their calling, and one man was drowned while engaged in work not immediately connected with fishing.

CASUALTIES.

During the year ended 31st March, 1913, loans to a total amount of £11,556 4s. 4d. were issued by the Department for the provision of fishing vessels and gear.

LOANS.

Included in this amount are sums advanced to cover the cost of building and equipping new motor fishing boats (and the installation of motor power in existing fishing boats). Included also is a sum advanced for the purchase of a small secondhand steam drifter.

The Department varied their usual experiments in the marketing of oysters by disposing of their whole stock of salable oysters to a company recently formed for exploiting the fisheries of the coasts of County Galway and adjacent parts. Restocking operations, from stock derived chiefly from the public beds at Clarenbridge and Tralee Bay, were carried on at Clarenbridge, Westport, Ballylongford and Passage East.

OYSTERS.

The yield of the principal mussel fishery, that of Castlemaine Harbour, showed a considerable diminution on that of the previous year. The Department, in order to avert from the Castlemaine product the suspicion of contamination cast in recent years, in English markets, on mussels generally, made certain restrictive bye-laws in regard to portion of the harbour in which pollution might be possible.

MUSSELS.

The endeavours of the Department, to develop the sale of fish in Irish inland towns were continued successfully during the year.

**SALE OF FISH IN
INLAND TOWNS.**

NET-MENDING.

Instruction in the mending of nets was afforded at Howth, Kinsale, Arklow and Ardglass.

MARINE SUPERINTENDENCE. Convictions were obtained in six cases of illegal trawling by sailing vessels and in three cases by steam-trawlers.

Dredging operations by the Department's plant were carried on during the year at Arklow, Courtown, Kilmore, Ballintoy and Balbriggan. Good progress was made in the construction of the pier at Church Bay, Rathlin Island. Arrangements were made for the provision of better accommodation for fishing boats at Annagassan and Dunany, and schemes regarding Ballyhaek, Ballycastle (Co. Antrim), Portrush and Killough were considered. Further improvements at Ballaghahine, Co. Clare, were effected, and the landing accommodation at Malahide and at Blackweir (Galway Bay) was improved. At several places on the Wexford coast mechanical appliances for hauling boats were provided. Regarding works the cost of which is being provided from the Development Fund, a satisfactory start was made at Helvick, but at Kilkeel difficulties with the County Council delayed the commencement of operations.

The collection of water and plankton samples and the observation of temperature, started in connection with the work of the International Council for the Exploration of the Sea, have been carried on as usual and a report on the results thereof is in course of preparation. The investigation of the marine fauna of the Irish coast was continued, the results being published from time to time in the *Scientific Investigations of the Fisheries Branch*.

The salmon and trout fisheries appear to have been less productive than in any of the preceding four years. The take at sea by drift nets off the West and North coasts was, however, a good average. No serious case of disease was reported, although possible evidence was noticed of a disease which has appeared in a somewhat serious form during the year 1918. The estimated output of salmon and trout fry from hatcheries during the season 1912-13 was: Salmon, 5,597,000; white trout, 108,000; brown trout, 1,321,500.

The Department rendered financial assistance to local Boards of Fishery Conservators and Fishery Protection Associations, on certain conditions, to the following extent:—

					£	s.	d.
Dublin Board of Conservators	.	.	.	.	12	17	0
Waterford "	"	"	"	"	183	0	0
Lismore "	"	"	"	"	11	0	0
Cork "	"	"	"	"	340	0	0
Bandon "	"	"	"	"	50	0	0
Skibbereen "	"	"	"	"	35	0	0

		£	s.	d.	
Kennmare Board of Conservators	.	80	0	0	
Waterville	"	50	0	0	
Killarney	"	174	0	0	
Limerick	"	1,023	7	7	
Galway	"	50	0	0	
"	"	(towards cost of staunching			
	"	"swallow holes" in			
	"	Clare-Galway River)	50	0	0
Bangor	"	"	50	0	0
Ballina	"	"	250	0	0
Sligo	"	"	100	0	0
Ballyshannon	"	"	100	0	0
Coleraine	"	"	100	0	0
Drogheda	"	"	50	0	0
Destruction of Pike in the River Liffey	.	19	16	0	
Lough Derg Fisheries Society	.	50	0	0	
Lough Sheelin Trout Protection Association	.	30	0	0	
Westmeath Lakes Fish Protection Society	.	13	1	4	
Protection of Rivers in Boyle District	.	20	0	0	
Lough Mask and Carra Fishery Society	.	15	0	0	
Lough Corrib Association	.	25	0	0	
Loughs Conn and Cullen Fisheries Association	.	25	0	0	
Lough Arrow Fish Preservation Society	.	15	0	0	

4.—STATISTICS AND INTELLIGENCE.

The work of this Branch falls under four main heads:—

- (1.) The collection and publication of agricultural, trade, and other economic statistics relating to Ireland;
- (2.) The collection of information both at home and abroad on questions submitted to the Department and affecting its work;
- (3.) The editing of the Quarterly JOURNAL of the Department and press-editing of other publications issued by the Department;
- (4.) The supervision of the Department's printing and publishing work. The distribution and despatch of reports, leaflets, and the numerous other Departmental publications.

STATISTICAL SECTION.

This section has three main divisions—the Agricultural Statistics of Ireland, the Statistics of Irish Imports and Exports, and the Statistics of Prices of Irish Agricultural Products.

The Agricultural Statistics of Ireland include the statistics of the division of land, of the number and

size of agricultural holdings and of their distribution, of the area and produce of crops and the numbers and classes of live stock, of the extent and kinds of woods and plantations and of planting and felling operations, and also of the supply and migration of agricultural labour and the wages of the same.

Special statistics are also collected showing the area under the different classes of fruit; the extent under the several varieties of potatoes; the different breeds of live stock; the mortality of live stock; the extent of bee-keeping; the number and production of creameries, butter factories, corn mills, scutch mills, malt houses; and the numbers of the chief classes of farm machinery.

The statistics of the division of land and the number and classes of live stock, together with many of the special statistics, are collected annually in June. The preliminary results of the enumeration showing the areas under the various crops and the numbers of each description of live stock are published in August or September.

Particulars of the yield of the crops are collected from the end of August to early in December. Returns of the yield of hay are collected at the end of August, those of grain crops and potatoes at the end of October or early in November, and those of the root crops and flax at the beginning of December. As soon as the information thus collected has been examined and compiled, it is issued in a series of bulletins—(1) Hay, (2) Grain Crops, (3) Potatoes, (4) Roots, and (5) Flax. This method of division enables the information regarding the several crops to be made known at as early a date as possible. Care is taken not to collect this final statistical information regarding each crop until almost the whole has been saved, as otherwise an erroneous estimate might be formed.

Finally, in the volume of Detailed Agricultural Statistics which is issued later, full and revised tables are furnished showing, as compared with previous years, the area and produce of crops and the numbers of live stock. In this volume are also contained particulars of the acreage of agricultural holdings; statistics of forestry; and various other statistics relating to varieties of fruit, live stock, scutch mills, etc.

A separate report is issued annually on the subject of Irish Agricultural Labour. This report deals with the annual migration of agricultural labourers to England and Scotland, with the supply of agricultural labour in Ireland, and with the wages earned by Irish agricultural labourers respectively in Ireland and Great Britain.

In October, 1912, the Department published a Report and Tables regarding the Agricultural Output of Ireland in the year 1908. These were compiled as the result of an investigation conducted by the Statistics and Intelligence Branch in accordance with a request made by the Board of Trade in connection with the Census of Production Act, 1906. This Report is the first of its kind published for Ireland, and the compilation of it presented considerable difficulties; but the results as shown in the Report fully justified the labour expended on it as similar information was not previously available. The second Report

of this series will deal with the Agricultural Production of Ireland during the twelve months from 1st June, 1912, to 31st May, 1913, and investigations are at present being conducted in connection with the matter by the Statistics and Intelligence Branch.

During the year information showing the condition and progress of the crops is obtained from time to

CROP REPORTS. time from correspondents in the several counties, and five crop reports and two fruit crop reports, based on the information thus supplied, are issued during the course of the summer and autumn. During July and August special weekly reports also are received from each constabulary district giving particulars of the nature and progress of the potato blight, and stating the extent to which spraying operations were being carried out.

Reports on Irish Import and Export Statistics are published each year. The returns from which these

TRADE STATISTICS. Reports are compiled are in some respects still unsatisfactory. As has been pointed out in these Reports from time to time the returns relating to manufactured imports and exports are at present open to errors, which, under existing conditions, cannot be avoided, and, until adequate statutory powers are provided, it will be impossible to secure returns which are fully complete, reliable, and up-to-date.

Annual reports are issued dealing with the prices of Irish live stock and agricultural produce. Arrange-

PRICE STATISTICS. ments have been made for a considerable extension of the system of reporting prices of agricultural produce sold in the principal market towns. The number of Agricultural Products dealt with, and the number of towns from which Returns are received, have been considerably increased.

Two half-yearly reports are also issued by the Department on the Banking, Railway, and Shipping Statistics of Ireland.

Statistical leaflets are issued to the "Press," public and private companies and private individuals, showing:—

- (1.) Exports of animals. These are issued weekly, monthly, and yearly.
- (2.) Prices of live stock at the principal Irish markets and fairs. These are issued daily.
- (3.) The number of pigs killed or bought dead by Irish bacon curers. These are issued weekly.

Enquiries are constantly being received for statistical information from Government departments, public institutions, and private individuals in these and foreign countries and in the Colonies. This involves the compilation of a large number of special statistical tables each year.

The following statistical reports have been issued since the last Annual Report:—

- (1.) Detailed Agricultural Statistics of Ireland for the year 1912. Cd. 6987-1913.
- (2.) General Abstracts of the Acreage under Crops and Numbers and Descriptions of Live Stock in 1912-13. Cd. 7063-1913.
- (3.) Abstracts of the Average Yield and Total Produce of the following Crops in 1913:—(1) Hay, (2) Grain Crops, (3) Potatoes, (4) Root Crops, (5) Flax.
- (4.) Report and Tables Relating to Irish Agricultural Labourers in 1912. Cd. 6928-1913.
- (5.) Report on Imports and Exports at Irish Ports in 1912. Cd. 7059-1913.
- (6.) Return of Prices of Crops, Live Stock, and other Irish Agricultural Products, 1912. Cd. 6848-1913.
- (7.) Two half-yearly Reports on Banking, Railway, and Shipping Statistics in Ireland. Cd. 6836-1913; and Cd. 7083-1913.

INTELLIGENCE SECTION.

The collection of information by means of egg records has been continued during the past year, and
SPECIAL INQUIRIES. regular monthly returns have been received from about 170 correspondents. These records have proved of great interest and importance as showing in a concrete way the use of statistical method in farm work. A further development of the work has now taken place. Hitherto the records have been of flocks or pens, but a series of records, dealing with individual hens by means of the trap-nesting system, has been established. In connection with this matter it may be pointed out that an Egg Laying Competition, the first in Ireland, was conducted during the year at the Munster Institute, Cork. Quarterly reports of the progress of the Competition and a detailed report at its close were published in the Department's JOURNAL. The full detailed report has been issued as a JOURNAL reprint as will be seen from the list below. The keeping of records, whether in milk or egg production, is a matter of the greatest importance, as it is only by means of the records that reliable comparisons can be made, and that flocks and herds can be properly weeded of the least profitable stock. At the same time only by such continuous records and observation can the transmission of producing power be ascertained in a reliable manner. It is important, therefore, that this part of the work should be further developed, and that also in other branches of farm management more systematic information should be obtained as to actual costs of production on typical farms in Ireland. There is a great field for the useful development of statistical records and exact method of accounts as applied to farm work.

Among other inquiries special reference may be made to that on the organisation of the dressed meat trade. Several reports on this subject were published in the Department's JOURNAL, and further inquiries are being carried on.

The list of the principal Irish Exporting Manufacturers is still being issued at home and abroad, and every effort is being made to bring it under the notice of all likely to help in any way Irish industries and Irish industrial and commercial expansion. Inquiries are frequently received from foreign countries for the names of firms of Irish Producers, and it is hoped that this publication will greatly assist in making known the names of Irish firms and the merits of Irish goods.

The publication of the Quarterly JOURNAL has been continued as heretofore. Several contributions of "JOURNAL," special practical importance have been re-issued in the form of leaflets or pamphlets, including :—

The Dressed Meat Trade.
Pig Feeding with Uncooked Meal.
Live Stock Experiments.
Sugar Beet Experiments.
The Elimination of the Unprofitable Cow.
The Progress of the Irish Dairying Industry.
Tests with Four Nitrogenous Manures.
Tobacco Growing Experiments, 1912.
Investigations of Potato Diseases, 4th Report.
Profitable Trees.
A Danish Eel Farm.
The First Irish Egg-Laying Competition.
The Keeping of Egg Records.
Winter Egg Records.

The following Departmental Publications have been issued during the year and are on sale to the public :—

Cookery Notes (Fourth Issue).
Report on Foot-and-Mouth Disease in Ireland in 1912.
The Management of a Cottage Garden. Third Issue.
Education and Citizenship : With Special Reference to the Labour Problem. By T. P. Gill.

Eight leaflets were re-issued in a revised form, viz. :—Results of Field Experiments in Barley, Meadow Hay, Potatoes, Mangels, Oats, Turnips, Flax and Wheat.

The special issue of leaflet No. 14 (Prevention of Potato Blight) to National Schools, etc., in Ireland, was repeated.

The total number of separate leaflets issued during the year amounted to, approximately, 810,000.

There has been a steady increase in correspondence with foreign countries and in the information furnished to the Department as regards agricultural development abroad. The great increase in agricultural research work as well as in the methods of organisation for the protection and development of agriculture in the different countries is a matter which requires the closest observation. No country can afford to ignore the steps which other countries are taking, or to neglect to compare results. During the year an Officer of the Branch visited Rome for the purpose of studying the work and organisation of the International Institute of Agriculture. Through the courtesy of the President, facilities were afforded for examining every branch of the Institute's activity. Particular attention was given to methods of collecting and disseminating agricultural and statistical information, and a special study was made of the Library of the Institute, its organisation, management and systems of cataloguing and shelf arrangement.

The Department are now in regular communication with the International Institute of Agriculture, Rome, Agricultural and Statistical Departments of the Colonies and the Chief Foreign Countries, and receive an exchange of publications which may be consulted in the Departmental Library. In addition, a large number of foreign agricultural publications of a non-official character are received and their contents indexed for the use of inquirers, and a monthly list of accessions to the Library is prepared and circulated.

PUBLICATIONS, DESPATCH, ETC., SECTION.

The work of this Section was of the usual miscellaneous and detailed nature, and consisted principally of the supervision of the Department's printing and publishing work; taking charge of the Department's advertising business; obtaining from H.M. Stationery Office, other Government Departments, firms, and individuals, the supplies of published books, blue books, maps, etc., required for the Department's work; and the distribution and despatch of Leaflets, Schemes, Quarterly JOURNAL, Annual General and other Annual Reports, Fair Reports, Crop Reports, etc., to the persons whose names appear on the Department's mailing lists, and to many other correspondents.

In connection with the inquiries, statistical and other, carried on by this Branch, the Department have to acknowledge the great assistance received from the Inspector-General of the Royal Irish Constabulary, the Chief Commissioner of the Dublin Metropolitan Police, the Registrar-General for Ireland, the Managers of the Irish Banks, the Irish Railway Companies, the Irish Port and Harbour Authorities, and also from a large number of correspondents who have furnished information on agricultural and other questions.

5.—VETERINARY.

The Veterinary Branch deals with the work connected with the Department's functions as the Central Authority in Ireland under the Diseases of Animals Acts. A separate and detailed report in relation to the proceedings under these Acts is issued for each calendar year. Consequently it is unnecessary to do more in this present Report than to touch briefly on some of the principal points in relation to the business of the branch during the twelve months ended 30th June, 1913.

The most outstanding feature of this period was the reappearance in Ireland of Foot-and-Mouth Disease, which had

FOOT-AND-
MOUTH DISEASE.

previously been unknown in the country for over 28 years. The history of this visitation is given very fully in a separate report issued on the subject by the Department. It has also been dealt with, more briefly, in the Annual Report of Proceedings under the Diseases of Animals Acts for the year ended 31st December, 1912. In these circumstances it will suffice to state here that the disease appeared in all on the premises of 68 different owners in seven counties, the number of animals actually found affected being 382. The period covered by the outbreak was slightly over four months, the earliest observed cases being confirmed on 30th June, and the latest on 7th November. These figures afford satisfactory testimony to the advantage of central control when dealing with so extremely infectious a malady. On the occasion of the former visitation, when the work of combating the disease was mainly in the hands of Local Authorities, the outbreak lasted for over fifteen months, and during this time 3,541 premises in twenty counties were visited by the disease, and the number of animals attacked reached the total of 115,641.

Only a single case of Anthrax was recorded in Ireland in the year ended 30th June, 1913, as compared with six outbreaks, involving the death of ten animals, in the preceding twelve months.

ANTHRAX.

An Order bringing certain forms of Tuberculosis in cattle under the provisions as to compulsory slaughter of affected

BOVINE
TUBERCULOSIS.

animals by Local Authorities (with payment of compensation to owners), contained in Sections 19 and 20 of the Diseases of Animals Act, 1894, was issued by the Department in 1913, following the issue by the Board of Agriculture and Fisheries of a corresponding Order for Great Britain. The Irish Order came into force on 2nd June last. The period of its operation during the year at present under review did not,

therefore, extend to more than one month. During this time 95 cases of animals affected as described in the Order were dealt with, on the premises of 89 separate owners.

The position in regard to Swine Fever in Ireland was, on the whole, rather favourable during the year ended 30th June last. The aggregate of outbreaks recorded in this period was 161, as against 247 in the preceding twelve months.

113 outbreaks of Parasitic Mange were recorded in the year ended 30th June, 1913. This represents an advance on the preceding twelve months, when the total of confirmed outbreaks numbered 62 only.

There was a total absence of recorded cases of Glanders in Ireland during the year ended 30th June, 1913.

Sheep Scab is the only other scheduled contagious disease calling for notice in connexion with the year under review. The total number of recorded outbreaks during this period was 441, as compared with 357 during the twelve months ended 30th June, 1912.

6.—TRANSIT AND MARKETS.

Under this head are grouped matters relating to :—

- The transit of animals ;
- The transit of produce ;
- Railway rates ;
- The enforcement of the Sale of Food and Drugs Acts as regards butter, margarine, cheese, margarine-cheese, and milk ;
- The Merchandise Marks Acts ;
- The action taken by the Department's Staff in Great Britain ; and
- The Markets and Fairs (Weighing of Cattle) Acts, 1887 and 1891.

TRANSIT OF ANIMALS.

The conveyance of live stock in Ireland and the shipment of animals from the ports continued to receive the close supervision of the Department's Inspection Staff. Detailed information as to this work is published separately in the Annual Reports of the Department under the Diseases of Animals Acts.

TRANSIT OF PRODUCE.

The Transit Inspectors continued to give attention to the arrangements for the conveyance of agricultural produce, the manner of handling the consignments, and the condition of the boxes or cases in transit. Communications are sent to the Carrying Companies concerned whenever it is found that consignments are conveyed in waggons which are considered unsuitable in any respect or whenever any carelessness in handling consignments is observed. The use of unsuitable cases or defects in the preparation of the consignments are brought under the notice of the consignors.

The numbers of Inspections at Railway Stations and Ports were :—

Number of Inspections at	Railway Stations in Ireland	895
"	" Ports in Ireland	146
"	" Railway Stations and Ports in Great Britain	12

During the visits to Great Britain merchants at some of the principal centres were interviewed with regard to matters relating to the preparation and condition of consignments of Irish produce. It is satisfactory to note that at several Ports and large Railway Stations in England, a considerable improvement was observed in the arrangements for dealing with Irish produce.

In the latter portion of the year 1913 labour troubles at the Port of Dublin caused a serious interference with the conveyance of traffic through the Port.

Butter.

Improvement in the boxes used for the conveyance of butter continues—the boxes being more strongly constructed and presenting a neater appearance. The excellence of Irish butter is well established and the value of neat and inviting packages in securing a leading place for the butter in the markets in Great Britain appears to be more generally recognised. Some cases came under notice of the use of boxes constructed of timber which was of such thin scantling as to be scarcely strong enough to bear the ordinary strain of transit.

A few cases of the conveyance of packages, from the premises of merchants, in carts which had not been properly cleansed after use for the conveyance of coal or manure came under observation. Consignments arriving in a soiled condition at the markets cannot reach the price which they otherwise would command and consignors should take all practicable measures

CONVEYANCE
TO PREMISES OF
CARRYING
COMPANIES.

to secure that the packages will not get soiled during conveyance to the premises of Carrying Companies. The placing of consignments on the markets in a soiled condition also tends to lower the reputation of Irish butter. In some cases it appeared that consignments had been carted over comparatively long distances to railway stations without the provision of any covering to protect the butter from possible damage from heat.

The reports received from the Transit Inspection staff go to show that the improvement on the part of
 HANDLING AND CARRYING COMPANIES. Carrying Companies generally in the handling of consignments of butter was well
 LOADING. maintained. Due care is usually exercised

in the loading and unloading of the produce. Cases now rarely come under notice in which the waggons used for the conveyance of consignments are not in a clean condition or in which articles likely to taint the produce are loaded in close proximity to the butter.

Nearly one hundred refrigerator vans and special butter vans are provided by seven of the Irish Railway
 REFRIGERATION. Companies. There is still but little demand made by the large majority of consignors of Irish butter for the refrigerator vans.

Refrigerator vans and other vehicles specially constructed for the carriage of perishable traffic are, in warm weather, largely used for the conveyance of butter from the principal ports in Great Britain through which Irish butter is forwarded. When ordinary ventilated goods trucks are used special arrangements are made for ventilation and for the protection of the produce from the heat of the sun.

Fifteen of the cross-Channel vessels, available for the conveyance of butter and other perishable produce, are fitted with refrigerating apparatus. These vessels trade from Dublin, Cork, Waterford, and Rosslare.

Eggs.

There is still room for much improvement in the preparation of cases of eggs for the markets. The use
 CASES. of neat well-constructed cases, uniform in type, should prove of much assistance in securing a better place for Irish eggs in the markets in Great Britain. The risk of breakage in transit would be minimised and the cases should present an inviting appearance on arrival at their destination—an important factor in the securing of good prices. It is to be regretted that the importance of attractive packages is not adequately realised by some shippers—more reliance being apparently placed on the excellence of the eggs than on neatness and care in packing to secure their place in the markets.

Sometimes frail timber is used in the construction of the cases.

and openings through which eggs could be abstracted are left between the boards. The fastenings in some instances are not sufficiently firm—thus increasing the risk of injury in transit.

The use of damp straw or hay as packing material came now and again under notice. When the packing material is unsuitable the price of the eggs is likely to be reduced. Eggs so packed will not be purchased for high class trade.

Several complaints as to breakages of eggs in consignments were received. In some instances the damage might be traced to the use of flimsy cases, in others to accidents in transit or carelessness in handling.

In only a few occasions, however, did any carelessness in handling consignments—the turning of cases of eggs on end at railway stations—by the servants of Carrying Companies come under the notice of the Inspection Staff. There is reason to believe that cases of eggs are not always handled with sufficient care by the servants of shippers before the consignments are tendered to Carrying Companies for conveyance.

Fruit.

The Railway Companies appear to be fully alive to the necessities of the fruit traffic and minor improvements in the transit facilities are made from time to time.

A representation was received to the effect that one of the principal Railway Companies would not accept for conveyance other than at owner's risk apples packed in barrels with hay or straw heads. Inquiries were made in the matter. The Department were informed that no change had taken place in the procedure adopted by the Company in accepting consignments and that the practice of endorsing the receipts in cases in which it was considered that goods were not properly protected against pilferage or damage was general on all lines of railway.

Fish.

Visits are made by the Inspectors to the principal stations of despatch and transhipment and the arrangements for the traffic observed.

On two lines of railway special vans are available for the conveyance of fish. In the case of one line the consignments may be iced during conveyance. This enables the work of icing to be performed more satisfactorily than if it had to be done hurriedly at a station.

The question of expediting the despatch of consignments forwarded from an important fishing centre and their transfer at Dublin received the attention of the Carrying Companies.

In one case a pier has been extended so that catches of fish can now be landed at all states of the tide.

Fresh Meat.

Owing to the outbreaks of Foot and Mouth Disease in Ireland in the year 1912 and the consequent restrictions in the movements of live animals, a marked increase took place in the shipments of fresh meat from this country to England. Special transit facilities were made available and reduced rates were put into operation. When the restrictions were modified the activity in shipping fresh meat was not, however, maintained.

Transit Complaints.

One hundred and six complaints as to delays or damage to consignments in transit were received during the year ended the 30th June, 1913. A summary of the complaints and of the result of the inquiries made regarding them by the Department will be found in the Appendices, page [272].

Addressing of Goods.

Early in 1913 the attention of the Department was called to regulations which the Irish Railway Companies proposed to bring into operation on the 1st March, 1913, in regard to the addressing of goods. The proposed regulations provided that goods would only be accepted for conveyance when each article or package was fully addressed, exception being made in the case of certain specified articles and of full truck loads of traffic passing between any pair of stations in Ireland for one consignee. Subsequently the Companies announced that the proposed regulations would not come into operation on the date mentioned but that revised regulations would take effect as from the 31st March. Under the modified regulations it is not necessary to address fully each package or case, goods being accepted if the package or case "bears a legible distinguishing mark, together with the name of the destination station, or bears only a legible distinguishing mark on a label (on the letter-card principle, showing inside the names and addresses of both sender and consignee) which may be opened by the Railway Company if and when occasion requires."

Where there are more than five articles or packages of the same or similar description for the same consignee only a proportion need be labelled provided that each label shows the total number of articles or packages in the consignment.

From enquiries which were made by the Department it appeared that the practice of sending consignments "under mark" had been more generally adopted, that it was not always practicable to connect readily the consignments and the invoices proper to them, that consequently delay and in some cases misdelivery occurred and that generally the dealing with such consignments involved increased difficulty and additional labour. It was

also understood that during recent years there had been a considerable increase in the claims made in respect of delays or misdeliveries due to packages of goods having been insufficiently addressed.

The issue of regulations was therefore considered necessary by the Railway Companies.

Railway Rates.

Exclusive of complaints regarding general increase of rates by Railway Companies, forty-five com-

COMPLAINTS. plaints as to charges for the conveyance of merchandise were received during the

year ended the 30th June, 1913. The complaints related to basic slag, blackberries, butter, cheese, cotton meal, cream, fencing material, fresh meat, hay spice, honey, live stock, potatoes, poultry, etc.

Eight of the complaints had reference to the non-existence of through rates. Through rates were fixed in four cases. In one case the route mentioned by complainants was not regarded by the Companies as suitable for the traffic. Through rates were, however, in force by other routes. One case is still receiving attention.

Twenty of the complaints were to the effect that through rates for the conveyance of consignments were excessive. In nine cases reduced rates (with refunds in two instances) were arranged and in two cases the Companies were prepared to put reduced through rates into operation. Arrangements for refunds were made in two further cases.

Twelve of the complaints related to local rates. In one case reduced rates were put into operation. In another case it appeared that the question of a reduction in the rate would be considered favourably on the receipt by the Company of an application from complainants. In three cases the charges were reduced. In one case the Companies arranged to apply a reduced through rate to the consignment, a refund being made. The Companies concerned agreed to make refunds in two cases.

One complaint had reference to local and through rates. The through rate was reduced.

Four complaints were to the effect that charges had been collected on delivery in cases in which prepayment had been made. Refunds were arranged in these cases.

A summary of the complaints other than those relating to increases in rates will be found in the Appendices, page [289].

In May and June, 1913, public notice was given by the under-

mentioned Companies of proposed increases of about 4 per cent. as from the 1st July, in rates charged by them (a) for the carriage of traffic by merchandise train

and (b) for the carriage of perishable and other merchandise traffic by passenger train :—

INCREASES IN
RATES.

Ballycastle Railway Company; Castlederg and Victoria Bridge Tramway Co.; Cavan and Leitrim Railway Co.; Clogher Valley Railway Co.; Cork, Bandon, and South Coast Railway Co.; Cork, Blackrock and Passage Railway Co.; Cork and Macroom Direct Railway Co.; Cork and Muskerry Railway Co.; County Donegal Railways Joint Committee; Dublin and South Eastern Railway Co.; Great Northern Railway Co. (Ireland); Londonderry and Lough Swilly Railway Co.; Midland Great Western Railway of Ireland Co.; Midland Railway Co. (Northern Counties Committee); Sligo, Leitrim, and Northern Counties Railway Co.; South Clare Railway Co.; Strabane and Letterkenny Railway Co.; West Clare Railway Co.

Under Section 33 (6) of the Railway and Canal Traffic Act, 1888, fourteen days' notice of intended increases in rates must be given, but under statutes coming into force during the past 10 or 12 years and relating to certain Irish Railway Companies, one month's notice is required.

Accordingly increases cannot come into operation for a fortnight or a month as the case may be, but any complaint that the increased rates are unreasonable need not, it appears, be lodged within the fortnight or the month. The Railway and Canal Traffic Act, 1894, provides machinery for dealing with complaints as to rates or charges increased since the year 1892. The complaint must be made to the Board of Trade, and if the Board are unable to settle amicably the differences, it is open to the complainants to bring the matter for determination before the Railway and Canal Commissioners. The onus of proving that any increase in a rate or charge is reasonable is placed on the railway company.

The position of the Great Southern and Western Railway Company as regards increases in rates is different from that of other Irish Railway Companies, as under the Great Southern and Western and Waterford, Limerick, and Western Railway Companies Amalgamation Act, 1900, and the Great Southern and Western and Waterford and Central Ireland Railway Companies Amalgamation Act, 1900, no increase in rates charged on the amalgamated railways can be made without the consent of the Railway and Canal Commissioners. One month's notice of any application to the Commissioners for their consent to increased rates must be given.

The Fishguard and Rosslare Railways and Harbours Company are also debarred from increasing through rates, via the Port of Waterford, except with the consent of the Board of Trade or the Railway and Canal Commission. In June both Companies gave notice of inten-

tion to apply for consent to increases in rates. So far as the Department are aware the applications have not been made.

Subsequently the Great Southern and Western Company gave public notice of intention to increase, as from the 7th August, through rates between stations on the Company's system and stations on other Irish lines of railway. Increases were, it is understood, put into operation.

Under Section 7 of the Railway and Canal Traffic Act, 1888, certain local authorities or any such association of traders or freighters, or chamber of commerce or agriculture as may obtain a certificate from the Board of Trade that it is, in the opinion of the Board of Trade, a proper body to make such complaint, may make to the Commissioners any complaint which the Commissioners have jurisdiction to determine.

The Department are empowered, under Section 17 of the Agriculture and Technical Instruction (Ireland) Act, 1899, to appear as complainant on behalf of any persons aggrieved in reference to any matter (other than a matter affecting the Postmaster-General) which the Railway and Canal Commissioners have power to hear and determine and which relates to agriculture or to any other rural industry. Several complaints were made to the Department regarding the increases. Inquiries were made relative to the position of the Companies in regard to the question of the increases and steps were also taken to ascertain the effect which the increases would have on prices for agricultural produce and the cost of farming requisites. The matter is still receiving attention.

Notice was given of intention to increase, as from the 1st April, 1913, the goods rates between station, on Irish lines of railway on the one hand and the ports of Ardrossan, Ayr, Greenock, and Glasgow and stations on the Caledonian, Glasgow and South Western and North British Railways on the other hand. The particulars of the increases were given as follows:—

Rates not exceeding 12s. 6d. per ton, increase 10d. per ton.

Rates exceeding 12s. 6d. per ton, but not exceeding 20s. per ton, increase 1s. 8d. per ton.

Rates exceeding 20s. per ton, increase 2s. 6d. per ton.

It appeared that the increases were due to an advance on the charges for conveyance over the sea portions of the journeys.

Certain Steamship Companies trading from Dublin gave public notice of increases, as from the 1st July, 1913, in rates for goods traffic. The increases were stated to be due to "further increased working expenses."

The Railway and Canal Traffic Acts do not apply to independent Steamship Companies.

The Enforcement of the Sale of Food and Drugs Acts as regards Butter, Margarine, Cheese, Margarine-Cheese, and Milk.

The administration of these Acts is primarily the duty of the local authorities, i.e., the councils of the thirty-three administrative counties and of the eleven boroughs. The Department are empowered, in relation to any matter which appears to them to affect the general interests of agriculture, to direct an officer to procure for analysis samples of any article of food, and the Department may act in default of a local authority if they are of opinion that the failure of the local authority to enforce the Acts in relation to any article of food affects the general interests of agriculture. Samples of imported articles of food are taken by the Commissioners of Customs and Excise.

The inspectors under the Acts in thirty-one of the administrative counties are members of the Royal Irish Constabulary. Local officers as well as members of the Royal Irish Constabulary act as inspectors in the remaining two counties.

The borough councils of Dublin, Belfast, Clonmel, Drogheda, Kilkenny, Limerick, and Waterford employ local officers in the work of administering the Acts. In Limerick and Waterford members of the Royal Irish Constabulary also act as inspectors. In the remaining boroughs—Cork, Londonderry, Sligo, and Wexford—members of the Royal Irish Constabulary perform the duties.

During the year 1912 the total number of samples of butter, margarine, cheese, and milk taken by inspectors in the counties for analysis was 10,308. The number for the previous year was 9,829, and for the year 1910, 9,173. The increase in each year was distributed over all the articles of food mentioned.

The work of the inspectors in 1912 resulted in 247 prosecutions, in 204 of which convictions were obtained and penalties amounting to £209 14s. 9d. were imposed. The figures for 1911 were prosecutions 334, convictions 293, and penalties £271 16s. 11d. As will be observed, the proportion of the number of prosecutions to the number of samples taken is much less in 1912 than in the previous year. The improvement is particularly noticeable in the case of the butter samples. In 1911 the taking of 4,242 samples was followed by 164 prosecutions; in 1912 when 4,349 samples were purchased, the number of prosecutions fell to 66.

In the boroughs 4,297 samples of butter, margarine, cheese, and milk were obtained during the year 1912. There were 235 prosecutions, 222 convictions, and the penalties imposed amounted to £330 19s. 9d. In one case relating to new milk the defendant was ordered to be imprisoned for two months. In 1911, when a smaller number of samples, 4,020, was taken, there were 332 prosecutions, 308 convictions, and a total of

£625 10s. 9d. imposed in penalties. The improvement already observed in the case of the samples taken in the counties is again noticeable in the boroughs and, as before, specially applies to the sampling of butter. The numbers of samples of butter purchased in each year were practically the same (785 in 1911, 771 in 1912), while the number of prosecutions decreased from 40 in 1911 to 9 in 1912. The figures relating to the samples of milk taken in the boroughs are also noteworthy. They are as follows :—

	Samples.	Prosecutions.	Convictions.	Penalties.
1911	3,153	289	266	£521 15 9
1912	3 467	226	215	£323 4 8

The following table gives particulars of the numbers of samples of butter, margarine, and milk taken by officers of local authorities in each of the years 1908, 1909, 1910, 1911, and 1912, the numbers of prosecutions and convictions, and the amounts of the penalties imposed :—

YEAR.	BUTTER.				MARGARINE.			
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
				£ s. d.				£ s. d.
1908	4,538	168	137	121 18 0	173	16	14	24 6 0
1909	5,184	159	140	190 18 2	156	8	7	14 2 0
1910	4,655	124	116	111 14 10	137	9	8	8 18 1
1911	5,027	204	191	196 16 2	140	10	9	9 9 0
1912	5,120	75	67	48 18 7	190	0	7	5 14 6

YEAR.	MILK.			
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
				£ s. d.
1908	8,563	425	363	592 3 4
1909	8,402	371	331	475 8 3
1910	7,856	413	355	457 4 4
1911	8,101	451	401	691 2 6
1912	8,694	398	352	496 1 5

Tables giving details as to the samples of butter, margarine, cheese, margarine-cheese and milk taken by inspectors in the counties and boroughs during the year 1912 and the half-year ended the 30th June, 1913, will be found at pages [296] to [301] of the Appendices.

Under the Sale of Food and Drugs Act, 1899, the Department may direct officers to procure for analysis samples of articles of food. The result of the analysis of such samples must, in each case, be communicated to the local authority of the district in which the sample was taken, and if there is any infringement of the Sale of Food and Drugs Acts the duty of instituting proceedings falls on the local authority. During 1912 three officers of the Department obtained for analysis 876 samples—870 butter, 5 margarine and 1 cream. The samples were purchased in 81 counties and 7 boroughs. Of the butter samples 89 were obtained at markets.

Fifteen of the samples purchased as butter were found on analysis to contain more than 16 per cent. of water, one was certified as being adulterated with at least 60 per cent. of fats foreign to butter, and one was found to contain only 14 per cent. of butter.

In thirteen of the fifteen cases in which water in excess was found prosecutions were instituted by the local authorities concerned. Convictions followed in ten cases and penalties amounting to £5 8s. 3d. were imposed. Three cases were dismissed. In one of these the magistrates held that the butter, which was found to contain 17.5 per cent. of water, was genuine. In two other cases the samples, which were found to contain 17.25 and 17.5 per cent. of water respectively, had been sold as salt firkin butter.

The vendors of the two samples in respect of which proceedings were not instituted were cautioned by the local authorities—in one case it was not found practicable to have a summons issued within the prescribed time, and in the other case the local authority considered a caution sufficient as the vendor had purchased the butter with a guarantee that it was pure salt firkin butter and contained from 16 to 24 per cent. of moisture and had informed the officer at the time of sale that the butter was salt firkin butter.

Two of the fifteen samples which were found to contain over 16 per cent. of water were taken at certain markets as a result of a complaint made to the Department that much of the butter being sold at the markets in question during the month of October, 1912, contained an excessive proportion of moisture. An officer of the Department immediately visited the markets and obtained a number of samples. Proceedings were instituted

in respect of the sale of the two samples which contained excess water; a conviction was obtained in one case, while the other case (in which the sample contained 17.5 per cent. of water) was dismissed.

A prosecution was instituted by the local authority in respect of the sample which was certified as being adulterated with at least 60 per cent. of fats foreign to butter. The trader was convicted and fined £5. He petitioned for a remission of the fine, but it was decided that the penalty should be enforced. In the case in which the sample was found to contain only 14 per cent. of butter fat, the remainder being margarine, proceedings were also instituted by the local authority. The magistrates, however, dismissed the case on the ground that the statutory time limit of twenty-eight days had expired before the proceedings were instituted. The sample was purchased about 10.30 a.m. on the 22nd October and the summons was issued about 8.30 p.m. on the 19th November. The matter came before the Court of King's Bench by way of case stated. It was held that the magistrates were wrong in their decision and the case was referred back to them to hear and determine according to law. The magistrates, however, again dismissed the case, as it appeared that the portion of the sample retained by the Department had been inadvertently destroyed and the solicitor for the defence required this portion to be sent for analysis to the Government Laboratory.

Seventeen of the samples taken were of salt firkin butter. Three of these contained water in excess of 16 per cent. Reference has already been made to these cases.

Of the samples of margarine one was obtained from a package which was not labelled in the prescribed manner, was delivered in a wrapper on which the word "Margarine" was not printed, and was found on analysis to contain an excessive proportion of water—17 per cent. The vendor was prosecuted by the local authority and penalties amounting to £2 2s. 3d. were imposed.

In a second case in which the Department's officer asked for butter the vendor stated at the time of sale that the substance was not pure butter but was margarine. The package from which the sample was taken was not labelled "Margarine" nor was the wrapper marked as required by statute. The local authority prosecuted and the defendant was convicted and fined £2. It should be mentioned that test samples previously obtained at these premises and sold as butter to the Department's officer had proved on analysis to be margarine.

In a third case a label marked "Margarine" was not attached to the parcel from which the sample was taken and the sample

was delivered in a cardboard box bearing on three sides the word "Margarine" in conjunction with a fancy name which had not been approved by the Department for use in Ireland in connection with margarine. The Department considered that, in the circumstances, a caution would meet the requirements of the case, and they communicated with the vendor accordingly.

During the half-year ended the 30th June, 1913, officers of the Department obtained 584 samples of butter
 HALF-YEAR ENDED in 31 counties and 5 boroughs. Thirty-one
 30TH JUNE, 1913. of the samples were purchased at markets.

Sixteen of the samples contained over 16 per cent. of water. Eleven prosecutions were instituted by the local authorities, ten convictions were obtained and penalties amounting to £4 12s. 8d. were imposed. In three cases the percentage of water in excess was considered too slight for the institution of legal proceedings. In another case the sample was taken from salt firkin butter and was found to contain 19.5 per cent. of water. The local authority concerned, however, decided not to prosecute. The remaining sample, which was found to contain 20.6 per cent. of water, was taken from a firkin which bore a notice to the effect that the butter contained about 20 per cent. of moisture.

Four samples which were purchased as butter proved on analysis to be composed almost entirely of fats foreign to butter. Prosecutions were instituted in these cases, convictions followed, and penalties amounting to £17 10s. 6d. were imposed. In one case the sample was obtained on delivery at a customer's house. Two of these four prosecutions were against the same defendant.

In one sample the analysis disclosed the presence of 10.84 per cent. of common salt. The local authority had proceedings instituted for an offence under Section 6 of the Act of 1875. The defendant was convicted and a penalty of fifteen shillings was imposed.

Tables giving particulars as to the samples taken during the year 1912 and the half-year ended the 30th June, 1913, are printed at pages [302]-[303] of the Appendices.

MANUFACTURE OF AND WHOLESALE DEALINGS IN MARGARINE.	On the 30th June, 1913, the number of premises registered for wholesale dealings in margarine or margarine-cheese was 140, an increase of 8 during the twelve months. Fresh registrations were effected in the Boroughs of Belfast (six), Cork (one), Dublin (four), and Waterford (one), while the registrar
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in three cases in Belfast and in one case in the Borough of Dublin were cancelled.

The numbers of premises registered as manufactories of margarine and of margarine cheese on the 30th June were six and one respectively. At the same date in 1912 the numbers were five and two. The changes took place in the Borough of Water-

ford in which premises were registered for the manufacture of margarine and in County Cork in which the registration of a manufactory of margarine-cheese was cancelled.

A table showing as on the 30th June, 1913, the distribution of the registered manufactories and wholesale dealers will be found at page [304] of the Appendices.

Manufacturers of margarine and margarine-cheese and wholesale dealers in these articles are required under the Sale of Food and Drugs Act, 1899, to keep registers showing the quantity and destination of each consignment sent out by them, and officers of the Department are entitled to inspect these registers. Officers of the Department visit the premises of manufacturers and wholesale dealers and inspect the registers kept there.

In some cases during the year under review the registers examined did not appear to have been posted up to date, and in one instance a register was not available at the time of inspection. The Department communicated with the wholesale dealers concerned and pointed out the necessity for compliance with the statutory requirements.

On the 30th June, 1913, there were 171 butter factories (i.e., premises on which by way of trade butter is blended, reworked, or subjected to any other treatment but not so as to cease to be butter) registered in 20 counties and 6 boroughs. During the twelve months 21 factories were registered and there were 12 cancellations—a net increase of 9 in the total number registered. The premises registered during the year were distributed as follows:—three in County Cavan, fifteen in County Cork, one in County Fermanagh, one in Queen's County and one in County Wicklow. Registrations were cancelled in Cork Borough (one), County Cavan (six), County Cork (three), County Longford (one), and Queen's County (one).

A statement showing the number of butter factories in each administrative area will be found at page [304] of the Appendices.

During the year numerous visits were made by officers of the Department to registered butter factories, methods of treating butter were inquired into, and a large number of samples including some of preservatives were taken. In no case did the analysis of a preservative disclose the presence of any injurious ingredient.

No oil or fat capable of being used as an adulterant was found in any butter factory.

Advantage was taken of the officers' visits to observe the manner in which boxes, wrappers, &c., used in forwarding butter from the factories were branded or marked, and the

attention of the parties responsible was drawn to some cases in which descriptions which were regarded as inaccurate or misleading were used.

Premises which, the Department learned, were being used as butter factories though not registered as such with the local authorities, were visited during the period, and whenever it was found that butter was blended or reworked at the premises the requirements of the Butter and Margarine Act in regard to registration were explained to the proprietor. Several factories were registered as a result of this action.

As in previous years the majority of the samples obtained at butter factories during the twelve months SAMPLES TAKEN AT ended the 30th June, 1913, were taken as a BUTTER FACTORIES. test. Formal sampling is not, as a rule, resorted to before test samples have been found to contain water in excess of the standard of 16 per cent. or to be adulterated. Twenty-four test samples contained more than 16 per cent. of water the excess in many cases, however, being very slight. Communications in the matter were sent to the proprietors of the factories. Fourteen of these samples had not been reworked or otherwise treated at the factories.

Of fifty-three samples which were formally taken five were found to contain over 16 per cent. of water. In two of these cases, however, the excess was only .05 per cent. in each instance. In a third case the sample also contained an undue proportion of salt. Inquiry went to show that the butter from which this sample was taken was firkin butter and had not been subjected to treatment at the factory.

As regards the remaining two formal samples containing excess water these were not prepared for sale or consignment, and were obtained in a district in which test samples taken at factories had been found on analysis to contain an excessive proportion of moisture. The Department had inquiries made, as a result of which it appeared that the class of butter manufactured in the district was generally poor and that the faulty samples obtained by the officers were the result of defective methods of butter-making rather than of any deliberate attempt to defraud. The Department communicated with the local committee of agriculture and suggested that arrangements should be made to have a course of instruction in butter-making given in the district.

Five of the samples taken at butter factories were certified as containing small proportions of cane sugar. The factories were situated in the same district. The question then arose as to whether cane sugar in butter could be regarded as a preservative and inquiries were made in the matter. The information obtained by the Department went to show that cane sugar in butter should be considered an adulterant. However, during the progress of this inquiry the Department learned that proceedings had

been instituted by the local authority against a firm at Liverpool for the sale of butter containing 1·2 per cent. of cane or beet sugar. The butter had, it appeared, been supplied by a trader in Ireland, and at the hearing of the case the trader's name was substituted for that of the defendants. For the defence it was stated that the sugar was used merely as a preservative and that sugar had been so used in Irish butter for many years. The magistrate accepted the view that the sugar had been added as a preservative. He considered that its use as such, in addition to salt (of which the sample contained 4·16 per cent.), was not a contravention of the Sale of Food and Drugs Acts, and dismissed the case. An officer of the Department who gave evidence stated that in nearly twenty years' experience of the butter trade in Ireland he had never known sugar to be added to Irish butter. So far as the Department are aware there are no grounds for believing that, except in one district, sugar is added to Irish butter. The Department are giving the question their close consideration.

In the course of his inspection of a registered butter factory an officer of the Department learned that
 MILK-BLENDED BUTTER. butter was reworked in butter-milk at the factory. The attention of the proprietor was called to the requirements of the Butter and Margarine Act, 1907, in regard to the registration of milk-blended butter factories and to the provision that mixtures of butter and milk could only be dealt with under a name approved by the Department. The proprietor, however, expressed his intention of continuing to rework butter in butter-milk and had his premises registered by the local authority as a milk-blended butter factory, the registration as a butter factory being cancelled. An Inspector of the Department interviewed him shortly afterwards, when he stated that he would cease to rework butter in butter-milk. In due course he had the registration as a milk-blended butter factory cancelled and the premises were registered again as a butter factory.

Representations were made to the Department in regard to the question of amending the Sale of Butter
 SALE OF BUTTER (IRELAND) Regulations, 1902. It was
 REGULATIONS, 1902. alleged that the provision in the Regulations under which the presence of water in excess of 16 per cent. in a sample of butter raised a presumption that the butter was not genuine bore hardly on farmers who brought butter which was in an unfinished state to market, the butter being intended for sale to butter factory proprietors who would subsequently rework it. The Department saw no reason for amending the Regulations and pointed out that it was open to sellers to protect themselves by making sufficient disclosure at the time of sale as to the amount of water in their butter. It may be mentioned that

complaints have from time to time been made to the Department to the effect that butter purchased at certain markets contained an excessive proportion of water. Some of these complaints have been received from owners of butter factories.

Under the provisions of the Butter and Margarine Act, 1907, the approval of the Department is required for the use of fancy or other descriptive names in connection with margarine in Ireland. During the year ended the 30th June, 1913, applications were made to the Department for the approval of 170 names. Of these 134 were approved. Nineteen of the names had previously been approved by the Department. A list of the approved names will be found in the Appendices at page [805].

Lists of the names approved by the Department are issued at intervals to the local authorities for the information of the officers engaged in the administration of the Sale of Food and Drugs Acts.

The Commissioners of Customs and Excise inform the Department that during the twelve months ended the 30th June, 1913, their officers, acting under Section 1 of the Sale of Food and Drugs Act, 1899, and Section 5 of the Butter and Margarine Act, 1907, took 21 samples at Irish ports, viz., 7 samples of margarine at Dublin, 7 samples of margarine at Belfast, and 5 samples of margarine, 1 sample of condensed milk, and 1 sample of seed oil at Cork. In no case did any infringement of the sections appear to have taken place.

A list of the Analysts under the Sale of Food and Drugs Acts for the boroughs and counties in Ireland is printed at page [806] of the Appendices.

The Merchandise Marks Acts (Ireland).

Constant attention is given by Inspectors of the Department to the manner in which goods, particularly agricultural produce, are described. The Department are empowered to undertake prosecutions in certain cases under these Acts and are always prepared to investigate complaints made to them in regard to suspected fraud.

During the period under review comparatively few cases of the application of inaccurate or misleading descriptions to goods were brought to the Department's notice and in no case would the circumstances warrant legal proceedings.

The Department communicated with traders who were using, in connection with butter, descriptions which appeared to be inaccurate and likely to mislead purchasers. The results of these communications were in most cases satisfactory.

BUTTER.

Inquiries made as to a complaint that the practice of selling preserved eggs as fresh had been adopted in a certain district went to show that the fraud, if it had ever existed, had ceased.

In two instances eggs which were purchased on behalf of the Department in Dublin were found on examination to be preserved eggs, although when exposed for sale they had been described as new laid. Written assurances were given by the parties concerned that the misdescription would not again occur.

Purchase was made of collars described in the catalogue of a well-known firm as "Fourfold Irish Linen MISCELLANEOUS. Collars." Expert examination showed that some of the collars were composed of linen with cotton interlining and that others had one ply of linen on the outside top only. The head of the firm was interviewed. He admitted the insecurity of the description and undertook that it would not again be used in connection with such collars.

Descriptions applied to bacon and to lace were also the subject of investigation.

Suspicious business methods on the part of a few houses received close attention. Handkerchiefs purchased as linen from one of these establishments were found to be as described.

Collars stated to have been purchased as Irish linen were sent to the Department for examination. In one case the collar was altogether composed of cotton. The others were cotton with one face of union cloth.

In May, 1912, the attention of the Department was drawn to the failure of a country trader to obtain payment for certain consignments of eggs sold through a person acting as agent in Dublin. From inquiries made and from further complaints received it did not appear likely that payment would be obtained, and the information in the possession of the Department was placed at the disposal of the police authorities, who were also engaged in investigating complaints which had been made to them. Eventually the agent and a trader were charged with obtaining goods by false pretences and with conspiracy to defraud. They were found guilty and were sentenced to twelve months' imprisonment.

A somewhat similar case came under notice in June, 1913, when complaints were made to the Department by two traders that they had failed to secure payment for eggs supplied by them to a "Company" in Dublin. The Department, having made some inquiries, handed over the papers in the case to the police authorities, who had also received complaints. The police, when they had completed their investigations, arrested a man who traded under the title of the "Company" and charged him with obtaining butter and eggs by false pretences. The case was

heard at the Dublin City Commission in October, 1913, when the jury disagreed and the further trial was adjourned to December. The defendant was then found guilty and was sentenced to twelve months' imprisonment with hard labour.

The occurrence of frauds of this nature serves to emphasize the necessity for traders, especially in country places, making inquiries through the usual commercial channels as to the financial standing of firms to whom they propose to forward goods. Particular care should be taken when communications in which higher prices are quoted than those governing the market at the time are received from persons or firms with whom the trader has not had previous business transactions.

Action taken by the Department's Staff in Great Britain.

The Department's staff for the prevention of frauds affecting Irish produce in Great Britain consists of one Inspector and four Assistants. The services of an Expert Adviser are available whenever required.

Greater care was taken by traders respecting the accurate marking of articles exposed for sale and also in regard to verbal descriptions. A number of cases of the use of false or misleading descriptions came under notice. Cases in which articles had been falsely described as Irish and repeatedly sold as such were brought into Court. In other cases undertakings to discontinue the misleading descriptions were given.

Visits were made to markets, shows, and exhibitions in order to keep in touch with traders dealing in Irish produce, and valuable information, which proved of assistance in the suppression of frauds, was obtained.

The sampling by the staff in the several centres showed that the substitution of margarine for Irish butter

BUTTER. took place principally in the poorer districts and during the winter months.

Samples were taken in one of the London boroughs in November, 1912, and in 5 cases the Borough Council instituted proceedings in respect of margarine supplied as Irish butter. The defendants were convicted and fines were imposed—£15 with £3 8s. costs in one case, and £5 with 14s. 6d. costs in each of the other four cases.

In two cases in which butter which was believed to have been treated in a factory was sold as creamery butter the vendors were warned, the evidence available not being deemed sufficient to warrant the institution of proceedings.

Numerous disputes in regard to the quality of butter or the percentage of water in butter or short weights of consignments were brought before the Inspector. Satisfactory settlements resulted.

A few complaints as to the quality of cream were investigated.

Constant attention was given to the question of the descriptions applied to eggs. Investigations were made as to alleged repacking of foreign eggs in Irish cases, but in no instance was evidence of the application of misleading descriptions obtained.

In a number of cases in which it was suspected that bacon offered for sale as Irish was not of that description, purchases were made, but in none of the cases was it found that the bacon was not in accordance with the descriptions applied. In one case a complaint was made to the Inspector that Russian bacon was being supplied to a workhouse when Irish bacon had been specified in the contract. There seemed little doubt that the bacon supplied was not Irish, but the case appeared to be one for proceedings by the workhouse authorities.

The Staff obtained a large number of samples of articles offered for sale as linen, and the tests made go to show that the substitution of cotton or union, i.e., a mixture of linen and cotton, is rather widespread. The question of prosecutions in several cases is under consideration. In cases in which the evidence available did not appear to justify proceedings the traders were interviewed and cautioned as to the sale of cotton or 'union' as linen. In each case an undertaking as to future methods of trading was given.

Proceedings were instituted at South Molton, Devonshire, by the Board of Trade at the instance of the Department's Inspector, against three persons for having caused a firm of manufacturers to apply to collars a false trade description "True Irish." (The firm had previously been successfully prosecuted for applying the description.) The defendants had registered a trade mark showing the head of an Irish terrier with the words "Terrier Brand" above and "Real Irish" below—the trade mark by the terms of the registration being confined to collars, cuffs, and fronts made in Ireland. The collars were made at South Molton. The defendants were fined £2 each and were ordered to pay £5 5s. costs and 16s. Court fees.

Proceedings were also taken by the Board of Trade against a trader in Balham for having for sale and for selling collars to which a false trade description "linen" had been applied. The collars were found to be made from cotton. The case was heard at the South Western Police Court, London, and a fine of £10 with £10 10s. costs was imposed in respect of the charge of selling. The summons regarding the other charge was withdrawn.

A hawker who used a circular purporting to be issued by an Irish Linen Company in Belfast with a depot in London was prosecuted for applying a false trade description to handker-

chiefs. The practice was to leave the handkerchiefs together with the circular at private residences, and afterwards call for the price of the handkerchiefs it was decided to purchase. The handkerchiefs were made from cotton. The defendant had been cautioned previously and had given an undertaking to discontinue such method of trading. He expressed regret for his action and asked to be leniently dealt with. The magistrate took a lenient view of the case and bound the defendant to come up for judgment if called upon within twelve months. The proceedings were instituted by the Department's Inspector and the case was heard at the South Western Police Court, London.

In one instance a misleading advertisement which appeared in a trade journal was revised in a subsequent issue and regret was expressed that a misdescription should have occurred. The attention of the Board of Trade had been called to this case by the Department's Inspector, but the advertisement had been rectified before action was taken. Any customer who might have been misled was asked by the firm to return the goods.

It may be mentioned that a firm having a number of branches in Great Britain, which was some time ago, at the instance of the Department's Inspector, successfully prosecuted by the Board of Trade in respect of the sale of cotton handkerchiefs as linen, has suspended business.

Samples of tweeds described as of Irish manufacture were

obtained and submitted for examination.

TWEEDS.

In one case tweed which was, it appeared, sold as Irish was pronounced by experts not to be of that description. Handkerchiefs which were represented as "linen" were found to be cotton. Proceedings for obtaining money under false pretences were instituted against the vendor by the Public Prosecutor at the instance of the Department's Inspector. The magistrates returned the accused for trial to the Norfolk Assizes, bail being allowed. The Grand Jury, however, threw out the bill.

Attention was given to the alleged sale, as Irish, of foreign made lace, and investigations were made as to the accuracy of the description Irish as applied to other articles. In no case, however, was the evidence obtained sufficient to warrant a prosecution.

Markets and Fairs (Weighing of Cattle) Acts, 1887 and 1891

Under these Acts the Department are concerned in seeing that, wherever necessary, suitable accommodation

INSPECTIONS. tion for weighing cattle is provided at fairs

where tolls are taken in respect of cattle and at auction marts. During the year under review a large number of inspections and inquiries were made by the Department's officers in connection with this question and whenever it

was considered that weighing facilities should be made available or that improvements in existing accommodation were required the attention of those responsible was drawn to the matter. In the generality of cases the market authorities and auctioneers concerned willingly met the requirements of the Department.

New weighing machines were provided at Cappawhite, at the Dublin Cattle Market, and at Headford, and various improvements were effected in the weighing accommodation at the fairs held at Birr, Foxford, Killorglin, Newport (Co. Tipperary), Newtownmore, Tralee, and Tubbercurry. In a number of cases the Department are in communication with market authorities as to the provision of new or improved accommodation.

During the year ended the 30th June, 1913, Orders exempting market authorities and auctioneers from the obligation to provide accommodation for weighing cattle were issued by the Department in the case of twenty-seven fairs and seven auction marts. A list of the fairs and auction marts will be found at page [307] of the Appendices.

I have the honour to be,

Your Excellency's faithful servant,

T. W. RUSSELL,
Vice-President.

T. P. GILL,
Secretary.

DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET,
DUBLIN, 10th February, 1914.

APPENDICES.

APPENDICES.

	Page
ACCOUNTS :	
The Parliamentary Grant,	[5]
The Sums Account,	[7]
The General Cattle Diseases Fund, including the Cattle Plague- Prevention Account for Ireland,	[8]
The Endowment Fund,	[10]
Details of Special Investigations,	[12]
Details of Miscellaneous Expenses,	[12]
Summary of Loan Accounts,	[13]
COUNCIL AND BOARDS :	
The Council of Agriculture,	[14]
The Agricultural Board,	[21]
The Board of Technical Instruction,	[22]
The Consultative Committee of Education,	[23]
AGRICULTURE :	
Table showing the Agricultural Schemes adopted by the several County Committees, and the Amount Allocated for each Scheme, &c.,	[24]
Table showing the Number of Instructors, &c., employed in each County in connection with Agricultural Schemes,	[26]
Scholarships for Students in Agriculture, Horticulture, Forestry, and Creamery Management,	[27]
Prospectus of Albert Agricultural College, Glasnevin,	[29]
Instruction in Fruit Growing and General Gardening,	[31]
Prospectus of Athyney Agricultural Station,	[32]
" Ballyheise " " " " " " " " " "	[33]
" Clonsilla " " " " " " " " " "	[36]
" Mount Bellew " College,	[38]
" Antrim Agricultural School,	[39]
The Munster Institute, Cork,	[41]
The Ulster Dairy School, Cookstown,	[42]
School of Rural Domestic Economy, Rensgrange,	[43]
" " " " Portlanna,	[44]
" " " " Killybeghara,	[45]
" " " " Loughgillyna,	[45]
Apprenticeships in Forestry,	[46]
Notice to Owners of Woods and Persons proposing to form Plantations,	[47]
County Forestry Scheme	[48]
Agricultural Schemes, 1912-1913.	
Circular Letter to County Committees,	[50]
Scheme for Encouraging Improvement in the Breeds of Horses,	[53]
Registration of Stallions,	[54]
Nominations of Mares,	[56]
Scheme for Encouraging Improvement in the Breeds of Cattle, 1913,	[56]

[3]

AGRICULTURE—continued.



Page

Scheme for Encouraging Improvement in the Breeds of Swine, 1913,	[63]
Loans for the Purchase of Stallions, 1913,	[66]
Loans for the Purchase of Bulls, 1913,	[67]
Subsidies to Agricultural and Industrial Societies, 1912-1913,	[69]
Scheme of Prizes for Cottages and Small Farms, 1913,	[71]
Scheme of Prizes for Flax on foot, 1913,	[73]
Scheme of Instruction in Agriculture, 1912-1913,	[74]
Scheme of Winter Agricultural Classes, 1912-1913,	[76]
Scheme of Instruction in Poultry Keeping, 1912-1913,	[80]
Scheme of Tutorial and Practical Classes in Poultry Keeping, 1912-1913,	[83]
Instruction in Butter Making, 1912-1913,	[89]
Scheme for Instruction in Horticulture and the Management of Bosc, 1912-1913,	[92]
Scheme for Encouraging Improvement in the Management of Creameries and Auxiliary Creameries,	[96]
Scheme of Loans for the Erection of Village Halls,	[101]
Scheme of Loans for the Erection of Fencing in Congested Counties,	[103]
Scheme of Loans for the Purchase of Agricultural Implements,	[104]
Scheme of Loans for the Erection of Small Iron Hay Bams,	[105]
Scheme for Encouraging Improvement in Dairy Cattle,	[106]
Scheme of Loans for the Repair and Equipment of Meal Mills, Killy, &c.,	[110]
Scheme of Veterinary Dispensaries in Congested Districts,	[111]
Scheme for Encouraging the Breeding of Irish Draught Horses,	[112]
Scheme of Loans to Members of Associations of Fruit Growers,	[113]
Scheme of Agricultural Experiments,	[115]
New Scheme of Field Manorial Experiments,	[124]
Egg Laying Competition, 1912-13,	[126]
American Gooseberry Mildew and Black Currant Mite (Ireland), Order, 1912,	[129]
Marketing of Eggs,	[132]
Purchase of Hen Eggs by Weight,	[135]

TECHNICAL INSTRUCTION:

Programme of Experimental Science, Drawing, and Domestic Economy for Day Secondary Schools,	[136]
Programme for Technical Schools and Classes,	[140]
Examples of Schemes of Technical Instruction in Non-Agricultural Subjects,	[167]
Forms relating to the conditions of Award of Scholarships offered for competition by the Departments,	[164]
Results of Competitions for Scholarships during 1913,	[189]
Table showing by Counties the amounts allocated from the Department's Endowment and from other Sources for the purposes of Technical Instruction in Non-Agricultural Subjects,	[190]
List of Technical Schools, showing Grants made by the Department during the Financial Year, 1912-13,	[194]

TECHNICAL INSTRUCTION—continued.

List of Day Secondary Schools, showing Grants paid by the Department during the Financial Year, 1912-13,	[202]
List of Primary Schools, showing Grants paid in respect of Instruction in Drawing and Manual Work,	[222]
Statement showing the occupation of Students attending Schools and Classes conducted under the conditions of Schemes of Technical Instruction in Non-Agricultural Subjects,	[236]
Technical School Examinations—List of Centres,	[240]
" " " Summaries of Results,	[242]
" " " Results at each Centre,	[244]
Local Science and Art Examinations, List of Centres,	[246]
" " " Summaries of Results,	[247]
Medals, Prizes, and Awards gained by Irish Students, National Competition, 1913,	[249]
Examinations in Subjects of Technology—Summaries of Results,	[251]
Prizes and Medals gained by Irish Students,	[252]

ROYAL COLLEGE OF SCIENCE:

Report of the Council, 1912-13,	[254]
" Registrar, 1912-13,	[265]

METROPOLITAN SCHOOL OF ART:

Report of the Head Master, 1912-13,	[269]
---	-------

TRAFFIC AND MARKETS:

Summary of Inquiries in regard to Complaints respecting delays in Conveyance of Merchandise,	[272]
Summary of Results in connection with Complaints as to Rates Charged by Carrying Companies,	[289]
Statements giving particulars of the Proceedings under the Sale of Food and Drugs Act,	[296]
Number of Premises Registered for the Manufacture of Margarine,	[304]
Number of Premises Registered as Butter Factories,	[304]
List of Names approved in connection with Margarine,	[305]
List of Analysts,	[306]
List of Fairs and Auction Marts in respect of which Exemption Orders under the Market and Fairs (Weighing of Cattle) Acts have been issued,	[307]

GEOLOGICAL SURVEY OF IRELAND:

Report of the Director,	[308]
-----------------------------------	-------

INSTITUTIONS OF SCIENCE AND ART:

Report of the Director of the National Museum,	[310]
" Board of Visitors of the Institutions,	[338]
" Trustees of the National Library of Ireland,	[348]
" Librarian of the National Library of Ireland,	[361]

PARLIAMENTARY GRANT.

Vote, Class IV., 13, *Science and Art, Ireland.*

[Monies voted by Parliament to defray Expenses connected with the maintenance of the National Museum, National Library of Ireland, Metropolitan School of Art, Royal Botanic Gardens, Royal College of Science, and Geological Survey of Ireland; and to provide for the payment of Grants to Schools and Classes of Science and Art and Technical Instruction.]

ACCOUNT OF PARLIAMENTARY GRANT in the year ended 31st March, 1913.

RECEIPTS.	PAYMENTS.
£ s. d.	£ s. d.
Parliamentary Grant 124,591 0 0	INSTITUTIONS OF SCIENCE AND ART.
Appropriations in Aid 1,563 10 11	Salaries, Wages, and Allowances . . . 33,191 2 0
	Purchase of Specimens for Museum— (Grant in Aid) . . . 2,399 0 0
	Purchase of Books for National Library— (Grant in Aid) . . . 1,300 0 0
	Furniture, materials, &c., and doing up of objects . . . 2,312 11 4
	Royal College of Science—Purchase of Specimens, Books, Apparatus for Laboratories, &c. (Grant in Aid) . . . 2,600 0 0
	Royal College of Science—Prizes, Scholarships and Bursaries . . . 4,134 6 10
	School of Art—Acquisitors and Models, Materials, &c. . . 226 10 3
	School of Art—Prints, &c. . . 244 16 7
	Botanic Gardens—Purchase of seeds, plants, books, timber and garden sundries . . . 540 1 3
	Travelling . . . 123 19 4
	Incidental Expenses . . . 604 7 2
	—
	SCHOOLS OF SCIENCE AND ART, &c.
	Annual Grants to Schools and Classes of Science and Art and Technical Instruction . . . 45,864 17 13
	Grants for Drawing and Manual In- struction in Miscellaneous Schools 1,836 9 0
	Grants for Day Secondary Schools . . 27,714 7 4
	—
	GEOLOGICAL SURVEY OF IRELAND.
	Salaries, Wages and Allowances . . 2,147 13 7
	Travelling . . . 364 17 5
	Incidental Expenses . . . 61 4 2
	130,055 6 2
	Balance on 31st March, 1913 . . 10,587 4 9
Total . . . 126,154 10 11	Total . . . 140,642 10 11

[7]

SUSPENSE ACCOUNTS.—VOTE, DEPARTMENT OF AGRICULTURE.

	Balance on 1st April, 1912.	Receipts in 1912-1913.	Payments in 1912-1913.	Balance on 31st March, 1913.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Tobacco Growing Experiments (Grant in Aid Fund) . . .	7,856 1 3	6,000 0 0	7,507 10 8	6,258 10 7
Development Fund Account, . . .	1,360 7 4	26,175 19 4	*27,161 19 10	274 6 10
Advance from Civil Contingencies Fund in connection with Foot and Mouth Disease, . . .	—	35,000 0 0	35,000 0 0	—
Board of Trade—Consent of Production, . . .	—	650 0 0	411 0 0	239 0 0
General, . . .	—	12 10 0	12 10 0	—
Total, . . .	9,116 8 7	67,835 9 4	70,183 0 0	6,771 17 5

*£25,220 d. 3d. transferred to the Parliamentary Grant Account to meet the expenditure shown therein for Development Fund Services, and £1,551 15s. 10d. repaid to H.M. Treasury for credit of the Development Fund, being receipts in respect of Development Fund Services.

SUSPENSE ACCOUNTS.—VOTE, SCIENCE AND ART.

	Balance on 1st April, 1912.	Receipts in 1912-1913.	Payments in 1912-1913.	Balance on 31st March, 1913.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Purchase of Specimens for Museum (Grant in Aid Fund) . . .	716 8 6	2,300 0 0	2,674 8 2	342 0 4
Purchase of Books for National Library (Grant in Aid Fund) . . .	99 19 6	1,300 0 0	1,318 16 7	81 2 11
Royal College of Science—Purchase of Specimens, Books, Apparatus for Laboratories, &c. (Grant in Aid Fund) . . .	10,229 15 8	2,000 0 0	6,670 11 0	14,559 4 8
Advance Account—Buildings, &c., Royal College of Science, . . .	—	212 4 6	212 4 6	—
His Majesty's Stationery Office, . . .	3 14 3	32 12 7	30 8 5	5 18 5
Local Science and Art Scholarships and Exhibitions, . . .	—	168 14 0	168 14 0	—
Examination fees—South Kensington, Students' deposits—Royal College of Science, . . .	—	97 18 0	97 18 0	—
General, . . .	63 13 9	25 0 0	20 0 0	68 13 9
	9 11 8	27 4 0	28 0 0	8 15 8
Total, . . .	20,123 3 4	6,163 13 1	11,221 0 8	15,065 13 9

GENERAL CATTLE DISEASES FUND (IRELAND), INCLUDING
Account of RECEIPTS and PAYMENTS in respect of the GENERAL
PNEUMONIA ACCOUNT (IRELAND), for the

RECEIPTS.			
	£	s.	d.
GENERAL CATTLE			
Balance on 1st April, 1915			12,476 11 2
Assessments on Local Authorities (57 & 58 Vict., cap. 57, s. 71)	14,610	18	0
Proportion of Fines,	253	5	5
			<u>15,870 4 2</u>
			<u>28,346 15 4</u>
CATTLE PLEURO-PNEUMONIA ACCOUNT FOR			
MIL.			
Balance on 1st April, 1915			
Parliamentary Grant-in-Aid of the Account, under the Diseases of Animals Act, 1894 (57 and 58 Vict., c. 57, s. 75), for several expenses, including special expenditure for the protection of ex- posed Cattle,	100	0	0
Parliamentary Grant-in-Aid of the Account, for the costs of the execution of the Diseases of Animals Act, 1894 (57 and 58 Vict., c. 57, s. 75), as respects: Swine Fever,	3,000	0	0
Foot and Mouth Disease,	35,000	0	0
Parliamentary Grant-in-Aid of the Account, in respect of expenses in connection with the suppression of Rabies,	100	0	0
			<u>48,100 0 0</u>
Salvage of carcasses of animals slaughtered in con- nection with Swine Fever,			613 14 8
Salvage of carcasses of animals slaughtered in con- nection with Foot and Mouth Disease,			7,356 7 8
Transferred from the General Cattle Diseases Fund (57 and 58 Vict., c. 57, section 72 (3)),			6,751 4 0
Total,			<u>60,171 0 0</u>

{ 9 }

THE CATTLE PLEURO-PNEUMONIA ACCOUNT FOR IRELAND.

CATTLE DISEASES FUND (IRELAND), including the CATTLE PLEURO-
Year ended 31st March, 1913.

PAYMENTS.			£	s.	d.	£	s.	d.
DISEASES FUND (IRELAND).								
Recoupments to Local Authorities (57 and 58 Vict., c. 57, sec. 12)			5,885	18	10			
Fees,			81	4	6			
Travelling Expenses,			19	1	0			
Miscellaneous Expenses,			254	7	10			
Transferred to Cattle Pleuro-Pneumonia Account for Ireland (57 and 58 Vict., c. 57, sec. 12 (3b).						9,205	13	2
Balance on 31st March, 1912						5,761	4	0
						15,719	16	2
						20,766	15	4
IRELAND (PART OF THE GENERAL CATTLE DISEASES FUND).								
General Expenses—								
Salaries (including the pay of the Staff employed in cleansing, disinfection, branding, &c.),			6,732	16	1			
Fees,			5,429	17	6			
Travelling Expenses,			5,425	1	6			
Compensation to owners of animals slaughtered in connection with Swine Fever,			4,039	5	4			
Compensation to owners of animals slaughtered in connection with Foot and Mouth Disease,			24,566	13	9			
Miscellaneous (including the cost of acquiescence for cleansing and disinfection, and casual labour in lifting, burying, branding and removal of animals, and other petty expenses),			2,216	0	2	63,776	16	19
Rebates Expenses—								
Salaries and Fees,			—					
Travelling,			—					
Miscellaneous Expenses,			9	8				6 8
Balance on 31st March, 1912—								Nil.
Total						209,271	6	8

[Fund administered by the Department, in concurrence with the as regards certain special sums mentioned in Section 16 of the Act Industries, and Technical Instruction: Agriculture and Technical

Account of NET RECEIPTS and PAYMENTS by the Department in re-

Section of Act, 32 & 33 Vict., c. 59	RECEIPTS.			
		£	s.	d.
	Balance on 1st April, 1912,	23,703	4	0
	Parliamentary Grants—			
15 (d.)	Sum payable as an equivalent for the Salaries attached to Judgeships abolished, &c., in pursuance of the Supreme Court of Judicature (Ireland) (No. 2) Act, 1907, 50 and 51 Vict., c. 44,	12,099	0	0
15 (f.)	Sum representing the amount of expenses formerly paid out of Parliamentary Grants in connection with instruction given in Ireland in Agriculture, exclusive of such instruction given in Elementary National Schools,	5,000	0	0
—	Grant in Aid under Sec. 53 of the Irish Land Act, 1909, 2 Edw. 7, c. 42,	19,860	0	0
	Local Taxation (Ireland) Account—			
15 (m.)	Sum formerly payable to the Commissioners of National Education under the Local Taxation (Ireland) Act, 1898, 55 and 56 Vict., c. 65, sec. 2,	73,092	0	0
—	Sum payable under the Agriculture and Technical Instruction (Ireland) (No. 2) Act, 1909, 2 Edw. VII., c. 54,	5,000	0	0
15 (n.)	Irish Church Temporalities Fund—Annual sum payable,	10,000	0	0
15 (o.)	Sea and Coast Fisheries Fund—54 and 55 Vict., c. 45, s. 15 (2), Loans Repayments, &c.,	5,287	4	7
—	Interest on Securities and on Monies deposited,	5,190	13	9
—	Proceeds of Sale of Securities,	51,550	0	0
—	Agricultural Loans (Repayments),	14,442	0	0
—	Insurance of Live Stock	27	12	1
	Total,	2392,546	15	2

[11]

FUND.

Agricultural Board and the Board of Technical Instruction (except a, b, d, e, f), for the purposes of Agriculture, Fisheries and other Instruction (Ireland) Act, 1899, 62 & 63 Vict., ch. 50, and other Acts.)

spect of the ENDOWMENT FUND for the Year ended 31st March, 1913.

Section of Act 62 & 63 Vict., c. 50.	PAYMENTS.	£	s	d.
18 1 (A.)	Purchasing and stocking additional land, and providing suitable buildings, trunks and appliances for the Minister Institution.	183	2	3
" (a.) 1.	Grants sanctioned with the concurrence of the Board of Technical Instruction—	25,905	12	8
" (a.) 2.	Cowry Services, elsewhere than County Boroughs and making inquiries and collecting, Ac., information for the purpose of Technical Instruction.	29,745	15	0
—	Ireland Development Grant. Grant in Aid for the purpose of Technical Instruction.	6,946	14	3
18-2 (4.)	Sea Fisheries.	15,401	10	2
22 (4.)	Sea and Coast Fisheries Fund, 34 and 35 Vict., c. 48 (Advances).	11,815	6	8
18 1 (c.)	Superannuation of Officers transferred from National Education Office.	494	13	0
" (c.)	Travelling and Subsistence of Members of the Council and Boards.	841	19	8
—	Domestic Scholarship Fund.	18	27	11
—	Domestic Account.	24	14	9
18-1 (5.)	Grants sanctioned with the concurrence of the Agricultural Board—			
	Agriculture and other Rural Industries (including Expenses incurred under Section 17)—			
	Agricultural Instruction:			
	Albert Agricultural College.	2,371	10	9
	Minister Institute.	1,460	4	3
	County Agricultural Station.	344	4	4
	County Agricultural Station.	21,871	0	3
	County Agricultural Station.	1,348	10	11
	County Agricultural Station.	2,182	13	9
	County Agricultural Station.	6,616	17	3
	Agricultural Schools and Classes.	1,470	15	0
	Rural College of Science.	7,625	9	4
	Home Economics.	1,672	14	1
	Home Economics.	1,747	8	7
	Home Economics.	6,404	1	1
	Home Economics.	1,084	11	0
	Home Economics.	1,394	10	8
	Home Economics.	21,853	8	3
	Home Economics.	21,061	8	8
	Home Economics.	3,139	4	11
	Home Economics.	2,551	2	3
	Home Economics.	5,722	15	0
	Home Economics.	25,148	11	9
	Home Economics.	15,488	0	7
	Home Economics.	1,127	11	0
	Home Economics.	5,477	14	0
	Home Economics.	2,327	2	0
	Home Economics.	3,378	8	5
	Home Economics.	66	2	8
	Home Economics.	2,556	0	5
	Home Economics.	2,452	14	8
	Home Economics.	1,383	0	3
	Home Economics.	6,314	3	10
	Home Economics.	205,051	15	11
	Home Economics.	89,888	15	3
	BALANCE ON 31st MARCH, 1912.	438,550	15	2
	Total.	438,550	15	2

* This sum includes the expenditure of a Grant of £11,520 from the Agricultural Board for Manual Instruction and the teaching of Domestic Economy in Rural Districts.

**DETAILS OF SPECIAL INVESTIGATIONS (ENDOWMENT FUND) for the
Year ended 31st March, 1913.**

Sub-Head.	Gross Ex- penditure.	Receipts.	Net Ex- penditure.
	£ s. d.	£ s. d.	£ s. d.
Flax Scheme,	2,365 6 0	262 5 10	2,103 0 2
Feeding Experiments (pigs, cattle, &c.),	3 5 4	—	3 5 4
Cheese-making Experiments	211 4 3	—	211 4 3
Poultry Industry,	1,083 0 0	129 17 2	953 2 10
Potatoes,	523 17 0	3 10 0	520 7 0
Horticulture,	626 19 3	—	626 19 3
Tobacco Growing,	619 17 11	—	619 17 11
Seed Testing and Plant Diseases,	394 14 3	49 4 3	237 10 0
Implements for Experiments,	19 11 3	—	19 11 3
Cereal Experiments	805 2 8	—	805 2 8
Sugar Beet Trials,	30 18 8	—	30 18 8
Winter Dairying Scheme,	154 19 6	—	154 19 6
Cattle Mortality (Diseases in Farms Animals; Royal Vet- erinary College Grant; Warble Experiments),	434 0 1	43 9 7	390 10 6
Technical Aid to Industries (Dead Meat Trade, &c.),	359 18 9	—	359 18 9
Nitrogen Tests,	30 17 0	—	30 17 0
Pest Experiments	59 5 10	—	59 5 10
Total,	7,625 18 3	488 6 10	7,137 11 5

**DETAILS OF MISCELLANEOUS EXPENDITURE (ENDOWMENT FUND) for the
Year ended 31st March, 1913.**

Sub-Head.	Gross Ex- penditure.	Receipts.	Net Ex- penditure.
	£ s. d.	£ s. d.	£ s. d.
Journal & Leaflets, Cookery Notes, &c.,	144 9 7	25 13 4	117 16 3
Technical and Clerical As- sistance,	4,125 6 7	—	4,125 6 7
Treatment of Paddock,	706 4 10	—	706 4 10
Motor Service,	78 0 10	—	78 0 10
Circulating School Exhibits,	414 11 11	0 8 4	414 8 7
Erection of Notice Boards, earrings of leaflets, &c.,	8 13 0	—	8 13 0
Railway, &c., Rates Inquiries, Travelling of candidates tes- ted for appointments,	498 12 2	—	498 12 2
Libraries,	80 10 5	—	80 10 5
Law Charges (execution of loan bonds, &c.),	10 17 4	—	10 17 4
Employer's Liability In- surance,	27 15 5	0 0 9	27 14 8
Expenses of entertaining Commissioners, &c.,	111 10 2	26 2 4	85 7 10
General (Rent of Premises, removal expenses of officers, &c., &c.),	4 14 7	—	4 14 7
Total,	6,274 12 7	60 8 9	5,214 3 10

[13]

SUMMARY OF LOAN ACCOUNTS on 31st March, 1918

Nature of Loans.	Loans outstanding on 31st March, 1917.		Loans issued in 1917-18.		Principal repaid in 1917-18.	Interest received in 1917-18.	Loans outstanding on 31st March, 1918.	
	No.	Amount.	No.	Amount.			No.	Amount.
		£ s. d.		£ s. d.	£ s. d.	£ s. d.		£ s. d.
For the purchase of Bulls.	412	7,010 2 8	309	5,304 15 8	5,558 15 8	221 0 2	322	7,364 8 8
For the purchase of Stallions.	111	6,327 11 0	51	1,880 13 4	2,351 8 10	157 6 11	160	6,554 14 2
To Agricultural Credit Societies.	504	1,440 0 11	1	100 0 0	651 19 5	211 2 4	94	6,818 0 6
For the erection of Fencing.	220	4,356 8 2	170	2,780 0 0	025 7 5	147 18 8	402	6,571 0 30
For the purchase of Agricultural Implements.	110	583 18 7	111	1,772 7 4	319 10 10	17 17 4	165	2,060 13 1
For Industrial Development.	2	551 10 0	—	—	21 11 9	1 5 7	2	459 18 2
For erection of Village Halls.	5	1,545 0 0	1	65 0 6	172 10 0	21 12 7	7	1,703 10 6
For repairing & re-equipping Scotch Mills.	4	462 0 0	1	100 0 0	86 0 0	6 3 0	2	538 0 0
For Fruit Growing.	—	—	1	40 0 0	4 0 0	0 12 2	1	24 0 0
Repairs of Draining Mtns.	—	—	1	24 0 0	—	—	1	24 0 0
Total.	1677	79,472 16 8	516	11,146 16 4	10,055 15 11	779 6 8	1294	81,499 8 8

SEA AND COAST FURBERIES FUND LOANS:

Amount of Promissory Notes outstanding on 31st March, 1918, £54,155 5 0 representing 841 loans

BULLS SOLD UNDER SPECIAL SCHEME FOR CONFINED DISTRICTS:

Maximum sum outstanding for 53 bulls sold, £291 0 0

reducible if certain conditions are complied with to £200 0 0

Advances to Committees of Technical Instruction, £300 0 0

LOANS WRITTEN OFF AS IRRECOVERABLE IN THE YEAR

For the Purchase of Stallions.

Agricultural Credit Societies

£54 2 0 Including Interest

£20 0 0

£37 2 0

STATEMENT OF SECURITIES HELD ON 31st MARCH, 1918. FUND FOR TECHNICAL SECURITY IS HELD.

	Face Value	
	£ s. d.	
Local Loans Stock	90,000 0 0	Endowment
Guaranteed Loan Stock 2½%	67,052 13 4	Gifts.
Guaranteed 2½% Stock, 1902	10,983 19 1	Gifts.
Consols	20,000 0 0	Gifts.
Total	£188,445 13 5	

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

COUNCIL AND BOARDS, 1913.

- I.—COUNCIL OF AGRICULTURE.
Arranged in Alphabetical Order according to Provinces.
II.—COUNCIL OF AGRICULTURE.
Arranged according to Counties, &c.
III.—AGRICULTURAL BOARD.
IV.—BOARD OF TECHNICAL INSTRUCTION.
V.—CONSULTATIVE COMMITTEE OF EDUCATION.

I.—COUNCIL OF AGRICULTURE, 1913.

[104 Members, including the President and Vice-President.]
Arranged in Alphabetical Order according to Provinces.

LEINSTER (36 Members).

- Aird, James J., J.P. Maryborough, Queen's Co.
Bolger, John, J.P. Ferns, Co. Wexford.
Briseoe, Algernon T. F., J.P. Curristown House, Killucan, Co.
Westmeath.
Butler, John, J.P. Minauns, Callan, Co. Kilkenny.
Byrne, Thomas J., J.P. Rossmakes, Dundalk, Co. Louth.
Carew, Thomas M. Kildangan, Kinnegad, Co. Westmeath.
Carey, Patrick J., J.P. Tomanierin, Aughrim, Co. Wicklow.
Cogan, Denis J. 115 Thomas Street, Dublin.
Dolan, Joseph. Gaulstown, Dunleer, Co. Louth.
Dooley, James G. Hoods Grove, Rosbercon, New Ross, Co.
Wexford.
Downes, Robert. Russellstown, Mullingar, Co. Westmeath.
Esmonde, Sir Thomas H. Grattan, Bart., M.P. Ballynastragh,
Gorey, Co. Wexford.
Everard, Colonel Sir Nugent T., Bart., H.M.L. Randlestown,
Navan, Co. Meath.
Farrell, James P., M.P. Longford.
French, Peter, J.P., M.P. Bridgetown, Wexford.
Field, William, M.P. Blackrock, Co. Dublin.
Finlay, Rev. T. A., M.A. University Hall, Lower Hatch
Street, Dublin.
Hanlon, Patrick. Grangeforth, Carlow.
Horan, Michael J., J.P. Mile Tree House, Birr, King's County.
Kavanagh, Walter M'M., J.P., D.L. Borris House, Borris, Co.
Carlow.

[15]

- Kennedy, Patrick J., J.P. Rathore House, Enfield, Co. Meath.
 Loftus, Captain John E. B., J.P. Mount Loftus, Goresbridge.
 Co. Kilkenny.
 M'Carthy, James, J.P. Newfoundwell, Drogheda, Co. Louth.
 McMahon, Arthur, J.P. Colt Studfarm, Abbeyfeix, Queen's
 County.
 Massereene and Ferrard, The Rt. Hon. Viscount, D.S.O., J.P.
 Oriel Temple, Colton, Co. Louth.
 Minch, Matthew J., J.P. Rockfield House, Athy, Co. Kildare.
 Mooney, Joseph, J.P. Cabra Lodge, Cabra, Co. Dublin.
 Moore, Mathew. Garr, Rhode, Edenderry, King's County.
 Murphy, George F., J.P. The Grange, Dunsany, Co. Meath.
 O'Neill, Patrick J., J.P. Kinsealy House, Malahide, Co. Dublin.
 Peacocke, Charles H., J.P. Belmont, Wexford.
 Reynolds, Henry. Ballinalee, Edgeworthstown, Co. Longford.
 Ronaldson, William R., J.P. Barn Hall, Leixlip, Co. Kildare.
 Ross, James, J.P. Newport, Lenamore, Co. Longford.
 Wallace, Hugh. 28 Westmoreland Street, Dublin.
 Wolfe, George, J.P. Forenaughts, Naas, Co. Kildare.

ULSTER (27 Members).

- Andrews, Right Hon. Thomas. Ardara, Comber, Co. Down.
 Baillie, William. Martray Manor, Ballygawley, Co. Tyrone.
 Barbour, Frank. 4 Rosemount Terrace, Dunmurry, Co.
 Antrim.
 Barrie, Hugh T., J.P., M.P. Manor House, Coleraine, Co. Lon-
 donderry.
 Boyd, R. N. Carnall, Carnmoney, Co. Antrim.
 Clark, Alexander L., J.P. Moyola Lodge, Castledawson, Co.
 Londonderry.
 Cowdy, Frederick C. Edenderry Lodge, Banbridge, Co. Down.
 Crumley, Patrick, J.P., M.P. Enniskillen, Co. Fermanagh.
 Davison, Joseph. Bellaghy, Co. Londonderry.
 Dunlevy, James. Bay View, Donegal.
 Gallagher, Edward, J.P. Lansdowne House, Strabane, Co.
 Tyrone.
 Keenan, John, J.P. Leitrim, Castledawson, Co. Londonderry.
 Lynch, Frank J., J.P. Ballyjamesduff, Co. Cavan.
 Macafee, Thomas, J.P. Currysiskan House, Ballymoney, Co.
 Antrim.
 M'Cance, John S. F., J.P. Woodbourne, Dunmurry, Co. Antrim.
 M'Clure, Thomas A., J.P. Rose Lodge, Killylea, Co. Armagh.
 M'Glynn, The Rt. Rev. Monsignor, P.P., V.G. Parochial House,
 Stranorlar, Co. Donegal.
 M'Kenna, T. P., J.P. Mullagh, Kells.
 Montgomery, H. de F., J.P., D.L. Blessingbourne, Fivemile-
 town, Co. Tyrone.
 Murnaghan, George, J.P. Lisanelly House, Omagh, Co. Tyrone.
 Patrick, Captain John, J.P. Dunminning, Glarryford, Co.
 Antrim.

Porter, John Porter, J.P., D.L. Belleisle, Lisbellaw, Co. Fermanagh.
 Sharman-Crawford, Colonel R. G., J.P., D.L. Crawfordsburn, Co. Down.
 Sheils, Michael, J.P. Springbill Farm, Bangor, Co. Down.
 Sinton, Alfred H. Laurel Vale, Tandragee, Co. Armagh.
 Toal, Thomas, J.P. Smithboro', Monaghan.
 Ua Ciarrain, Rev. Lorcan, P.P. Rockecorry, Co. Monaghan.

MUNSTER (24 Members).

Ahern, Michael. 71 Summer Hill, St. Luke's, Cork.
 Bourke, John. Duckstown, Rathkeale, Co. Limerick.
 Brnsier-Creagh, Langley, J.P. Streamhill, Donemile, Co. Cork.
 Coghlan, Captain William C., J.P. Dromina, Rosduff, Co. Waterford.
 Cummins, Edmund, J.P. Brookhill, Fethard, Co. Tipperary.
 Duggan, Thomas, J.P. The Castle, Two-Mile-Borris, Thurles, Co. Tipperary.
 Dwyer, Joseph, J.P. Barnagree House, Roscrea, Co. Tipperary.
 Guhkins, William R., J.P. Cush House, Kilfinane, Co. Limerick.
 Hogan, Patrick J., J.P. Coolreagh, Bodyke, Co. Clare.
 Kelly, Most Rev. Denis, D.D., Lord Bishop of Ross. Bishop's House, Skibbereen, Co. Cork.
 M'Cowen, William Henry. Parknadoon, Tralee, Co. Kerry.
 M'Donald, William, J.P. Laharna, Minane Bridge, Carrigaline, Co. Cork.
 Mescal, Michael, J.P. Dromelihy, Coonclare, Co. Clare.
 Moclair, Patrick. Ballinree House, Cashel, Co. Tipperary.
 Montegale, The Right Hon. Lord, K.P., D.L. Mount Trenchard, Foynes, Co. Limerick.
 Nolan, Michael J., J.P. Moyvane House, Newtownsandes, Co. Kerry.
 Nugent, Edmond, J.P. Ballymacarbery, Clonmel, Co. Tipperary.
 O'Gorman, David Leo. Janeville, Fermoy, Co. Cork.
 O'Gorman, George, J.P. Kilknedan, Ballyhar, Co. Kerry.
 O'Mara, Stephen. Strand House, Limerick.
 O'Mullane, Timothy. Riversdale, Lombardstown, Co. Cork.
 Power, Thomas. Dungarvan, Co. Waterford.
 Ryan, Hugh P. Roskeen, Thurles, Co. Tipperary.
 Slattery, Michael, J.P. Killerk, Lisronagh, Clonmel, Co. Tipperary.

CONNACHT (15 Members).

Clonbrock, The Right Hon. Lord, K.P., H.M.L. Clonbrock, Ahascragh, Co. Galway.
 Conroy, Patrick D., J.P. Garrafin, Rossmuck, Co. Galway.

[17]

- Costello, P. J., J.P. Cloghansmore House, Cloghans Hill, Tuam,
Co. Galway.
Daly, Very Rev. Canon, D.D., P.P. Lavagh, Ballymote, Co.
Sligo.
Digges, Rev. Joseph G., M.A. Cloonahir, Lough Rynn R.S.O.,
Co. Leitrim.
Flynn, Rev. Charles, P.P., V.F. Ballinamore, Co. Leitrim.
Galvin, John. Mount Talbot, Roscommon.
Gore-Booth, Sir Jesslyn, Bart., J.P., D.L. Lissadell, Sligo.
Griffin, Thomas G., J.P. Gurteen, Ballinasloe, Co. Galway.
MacGuire, James P., J.P. Ruskey, Dromod, Co. Leitrim.
Manly, Rev. P. J., C.C. Carrick-on-Shannon, Co. Leitrim.
Morris, Daniel, J.P. Foxford, Co. Mayo.
Mulligan, Rev. Philip J., P.P. Carnacastle, Ballaghaderreen, Co.
Mayo.
O'Dowd, John, J.P., M.P. Dathi House, Bunnasadden, Co.
Sligo.
Wallace, Robert P., J.P. Clonmorris, Dromod, Co. Leitrim.

II.—COUNCIL OF AGRICULTURE, 1913.

[104 Members, including the President and Vice-President.]

Arranged according to Counties, &c.

LEINSTER (36 Members).

Members appointed by County Councils.

- Carlow*.—Hanlon, Patrick. Grangeforth, Carlow.
Kavanagh, Walter M.M., J.P., D.L. Borris House,
Borris, Co. Carlow.
Dublin.—Mooney, Joseph, J.P. Cabra Lodge, Cabra, Co.
Dublin.
O'Neill, Patrick J., J.P. Kinsealy House, Malahide,
Co. Dublin.
Kildare.—Minch, Matthew J., J.P. Rockfield House, Athy, Co.
Kildare.
Wolfe, George, J.P. Forenaughts, Naas, Co. Kildare.
Kilkenny.—Butler, John, J.P. Minnauna, Callan, Co. Kilkenny.
Dooley, James G. Hoodsgrove, Rosbercon, New
Ross, Co. Wexford.
King's County.—Horan, Michael J., J.P. Mile Tree House, Birr,
King's County.
Moore, Mathew. Garr, Rhode, Edenderry,
King's County.
Longford.—Reynolds, Henry. Ballinalee, Edgeworthstown, Co.
Longford.
Ross, James, J.P. Newport, Lenamore, Co. Long-
ford.

LEINSTER—Continued.**Members appointed by County Councils—Continued.**

- Louth*.—Dolan, Joseph. Gaulstown, Dunleer, Co. Louth.
 McCarthy, James, J.P. Newfoundwell, Drogheda, Co. Louth.
- Meath*.—Everard, Colonel Sir Nugent T., Bart., H.M.L. Randlestown, Navan, Co. Meath.
 Kennedy, Patrick J., J.P. Rathcore House, Enfield, Co. Meath.
- Queen's County*.—Aird, James J., J.P. Maryborough, Queen's County.
 McMahon, Arthur, J.P. Colt Studfarm, Abbeyleix, Queen's County.
- Westmeath*.—Briscoe, Algernon T. F., J.P. Curristown House, Killucan, Co. Westmeath.
 Downes, Robert. Russeltown, Mullingar, Co. Westmeath.
- Wexford*.—Bolger, John, J.P. Ferns, Co. Wexford.
 Peacocke, Charles H., J.P. Belmont, Wexford.
- Wicklow*.—Carey, Patrick J., J.P. Tomanierin, Aughrim, Co. Wicklow.
 Cogan, Denis J. 115 Thomas Street, Dublin.

Members appointed by the Department.

- Byrne, Thomas J., J.P. Rossmaken, Dundalk, Co. Louth.
 Carew, Thomas M. Kildangan, Kinnegad, Co. Westmeath.
 Esmonde, Sir Thomas H. Grattan, Bart., M.P. Ballynastagh, Gorey, Co. Wexford.
 Farrell, James P., M.P. Longford.
 French, Peter, J.P., M.P. Bridgetown, Wexford.
 Field, William, M.P. Blackrock, Co. Dublin.
 Finlay, Rev. T. A., M.A. University Hall, Lower Hatch Street, Dublin.
 Loftus, Captain John E. B., J.P. Mount Loftus, Goresbridge, Co. Kilkenny.
 Massereene and Ferrard, The Rt. Hon. Viscount, D.S.O., J.P. Oriel Temple, Collon, Co. Louth.
 Murphy, George F., J.P. The Grange, Dunsany, Co. Meath.
 Ronaldson, William R., J.P. Barn Hall, Leixlip, Co. Kildare.
 Wallace, Hugh. 28 Westmorland Street, Dublin.

ULSTER (27 Members).**Members appointed by County Councils.**

- Antrim*.—McCance, J. S. F., J.P. Woodbourne, Dunmurry, Co. Antrim.
 Patrick, Captain John, J.P. Dunminning, Glarryford, Co. Antrim.

[19]

ULSTER—Continued.

Members appointed by County Councils—Continued.

- Armagh*.—McClure, Thomas A., J.P. Rose Lodge, Killylea, Co. Armagh.
 Sinton, Alfred H. Laurel Vale, Tandragee, Co. Armagh.
- Cavan*.—Lynch, Frank J., J.P. Ballyjamesduff, Co. Cavan.
 McKenna, T. P., J.P. Mullagh, Kells.
- Donegal*.—Dunlevy, James. Bay View, Donegal.
 McGlynn, The Rt. Rev. Monsignor, P.P., V.G. Parochial House, Stranorlar, Co. Donegal.
- Down*.—Andrews, Right Hon. Thomas, Ardara, Comber, Co. Down.
 Sharman-Crawford, Col. R. G., J.P., D.L. Crawfordsburn, Co. Down.
- Fermanagh*.—Crumley, Patrick, J.P., M.P. Eaniskillen, Co. Fermanagh.
 Porter, John Porter, J.P., D.L. Belleisle, Lisbellaw, Co. Fermanagh.
- Londonderry*.—Barrie, Hugh T., J.P., M.P. Manor House, Coleraine, Co. Londonderry.
 Keenan, John, J.P. Leitrim, Castledawson, Co. Londonderry.
- Monaghan*.—Toal, Thomas, J.P. Smithboro', Monaghan.
 Ua Ciaraín, Rev. Lorcan, P.P. Rockcorry, Co. Monaghan.
- Tyrone*.—Montgomery, H. de F., J.P., D.L. Blessingbourne, Fivemiletown, Co. Tyrone.
 Murnaghan, George, J.P. Lisanelly House, Omagh, Co. Tyrone.

Members appointed by the Department.

- Baillie, William. Martray Manor, Ballygawley, Co. Tyrone.
- Barbour, Frank. 4 Rosemount Terrace, Dunmurry, Co. Antrim.
- Boyd, R. N. Carrall, Carrmoney, Co. Antrim.
- Clark, Alexander L., J.P. Moyola Lodge, Castledawson, Co. Londonderry.
- Cowdy, Frederick C. Edenderry Lodge, Banbridge, Co. Down.
- Davison, Joseph. Bellaghy, Co. Londonderry.
- Gallagher, Edward, J.P. Lansdowne House, Strabane, Co. Tyrone.
- Macafee, Thomas, J.P. Currysiskan House, Ballymoney, Co. Antrim.
- Sheils, Michael, J.P. Springhill Farm, Bangor, Co. Down.

MUNSTER (24 Members).*Members appointed by County Councils.*

- Clare*.—Hogan, Patrick J., J.P. Coolreagh, Bodyke, Co. Clare.
 Mesenl, Michael, J.P. Dromelhy, Coonclare, Co. Clare.
- Cork*.—Abern, Michael. 71 Summer Hill, St. Luke's, Cork.
 Brasier-Creagh, Langley, J.P. Streamhill, Doneraile, Co. Cork.
 M'Donald, William, J.P. Laharan, Minane Bridge, Carrigaline, Co. Cork.
 O'Mullane, Timothy. Riversdale, Lombardstown, Co. Cork.
- Kerry*.—Nolan, Michael J., J.P. Moyvane House, Newtownsandes, Co. Kerry.
 O'Gorman, George, Kilkneedan, Ballyhar, Co. Kerry.
- Limerick*.—Bourke, John. Duckstown, Rathkeale, Co. Limerick.
 Gubbins, William R., J.P. Cush House, Kilfinane, Co. Limerick.
- Tipperary, N.R.*—Duggan, Thomas, J.P. The Castle, Two-Mile-Horris, Thurles, Co. Tipperary.
 Ryan, Hugh P. Roskeen, Thurles, Co. Tipperary.
- Tipperary, S.R.*—Moelair, Patrick. Ballinree House, Cashel, Co. Tipperary.
 Slattery, Michael, J.P. Killerk, Lisronagh, Clonmel, Co. Tipperary.
- Waterford*.—Nugent, Edmond, J.P. Ballymacarbery, Clonmel, Co. Tipperary.
 Power, Thomas. Dungarvan, Co. Waterford.

Members appointed by the Department.

- Coghlan, Captain Wm. C., J.P. Dromina, Rosduff, Co. Waterford.
- Cummins, Edmund, J.P. Brookhill, Fethard, Co. Tipperary.
- Dwyer, Joseph, J.P. Barnagree House, Roscrea, Co. Tipperary.
- Kelly, Most Rev. Denis, D.D., Lord Bishop of Ross, Bishop's House, Skibbereen, Co. Cork.
- M'Cowen, William Henry. Parknadoon, Tralee, Co. Kerry.
- Monteagle, The Right Hon. Lord, K.P., D.L. Mount Trenchard, Foynes, Co. Limerick.
- O'Gorman, David Leo. Janeville, Fermoy, Co. Cork.
- O'Mara, Stephen. Strand House, Limerick.

CONNACHT (15 Members).*Members appointed by County Councils.*

- Galway*.—Conroy, Patrick D., J.P. Garafin, Rosmuck, Co. Galway.
 Griffin, Thomas G. Gurteen, Ballinasloe, Co. Galway.

{ 21 }

CONNACHT—Continued.

Members appointed by County Councils—Continued.

- Leitrim.—Flynn, Rev. Charles, P.P., V.F. Ballinamore, Co. Leitrim.
 Manly, Rev. P. J., C.C. Carrick-on-Shannon, Co. Leitrim.
 Mayo.—Costello, P. J., J.P. Cloghansmore House, Cloghans Hill, Tuam, Co. Galway.
 Morrin, Daniel, J.P. Foxford, Co. Mayo.
 Roscommon.—Galvin, John. Mount Talbot, Roscommon.
 MacGuire, James P., J.R. Ruskey, Dromod, Co. Leitrim.
 Sligo.—Daly, Very Rev. Canon, D.D., P.P. Lavagh, Ballymote, Co. Sligo.
 O'Dowd, John, J.P., M.P. Dathi House, Bunnanadden, Co. Sligo.

Members appointed by the Department.

- Clonbrock, The Right Hon. Lord, K.P., H.M.L. Clonbrock, Abascragh, Co. Galway.
 Digges, Rev. Joseph G., M.A. Cloonshir, Lough Rynn R.S.O., Co. Leitrim.
 Gore-Booth, Sir Joselyn, Bart., J.P., D.L. Lissadell, Sligo.
 Mulligan, Rev. Philip J., P.P. Carrnacastle, Ballaghaderreen, Co. Mayo.
 Wallace, Robert P., J.P. Clonmorris, Dromod, Co. Leitrim.

III.—AGRICULTURAL BOARD.

(14 Members.*)

- Clark, Alexander L., J.P. Moyola Lodge, Castledawson, Co. Londonderry. *Appointed by the Department.*
 Dale, Alderman Henry, J.P. Riverview House, Sunday's Well, Cork. *Appointed by the Department.*
 Daly, Very Rev. Canon, D.D., P.P. Lavagh, Ballymote, Co. Sligo. *Appointed by Connacht Provincial Committee.*
 Downes, Robert. Russellstown, Mullingar. *Appointed by Leinster Provincial Committee.*
 Everard, Colonel Sir Nugent T., Bart., H.M.L. Randlestown, Navan, Co. Meath. *Appointed by the Department.*
 Gore-Booth, Sir Joselyn, Bart., D.L. Lissadell, Sligo. *Appointed by the Department.*
 Henly, His Grace The Most Rev. John, D.D., Lord Archbishop of Tuam. St. Jarlath's, Tuam, Co. Galway. *Appointed by Connacht Provincial Committee.*

* By section 24 (3) of the Agriculture and Technical Instruction (Ireland) Act, 1880, the President and Vice-President of the Department are ex-officio Members of the Board.

AGRICULTURAL BOARD—Continued.

- Kelly, Most Rev. Denis, D.D., Lord Bishop of Ross. Bishop's House, Skibbereen, Co. Cork. *Appointed by Munster Provincial Committee.*
- M'Cance, John S. F., J.P. Woodbourne, Dunmurry, Co. Antrim. *Appointed by Ulster Provincial Committee.*
- Murnaghan, George, J.P. Lisanelly House, Omagh, Co. Tyrone. *Appointed by Ulster Provincial Committee.*
- O'Gorman, David Leo. Janeville, Fermoy, Co. Cork. *Appointed by Munster Provincial Committee.*
- O'Neill, Patrick J., J.P. Kinsealy House, Malahide, Co. Dublin. *Appointed by Leinster Provincial Committee.*

IV.—BOARD OF TECHNICAL INSTRUCTION.

(32 Members.*)

- Barbour, Frank. 4 Rosemount Terrace, Dunmurry, Co. Antrim. *Appointed by Ulster Provincial Committee.*
- Crozier, James, J.P., V.S. Montpeller House, Phoenix Park, Dublin. *Appointed by Dublin County Borough Council.*
- Dickson, Alexander. 15 Parliament Street, Dublin. *Appointed by Dublin County Borough Council.*
- Dunn, Christopher J., J.P. Hotel Metropole, Cork. *Appointed by the Department.*
- Evans, Rev. Henry, D.D., M.R.I.A., F.I.H. St. Helen's, Blackrock, Co. Dublin. *Appointed by Commissioners of National Education.*
- Finlay, Rev. T. A., M.A. University Hall, Lower Hatch Street, Dublin. *Appointed by Leinster Provincial Committee.*
- Henderson, Sir James, J.P., D.L. Oakley House, Windsor Park, Belfast. *Appointed by the Department.*
- Johnston, Sir John Barr, J.P. Crawford Square, Londonderry. *Appointed by Londonderry County Borough Council.*
- Mucartney, William, J.P. 33 Cliftonville Road, Belfast. *Appointed by Belfast County Borough Council.*
- M'Clelland, John A., M.A., D.Sc., F.R.S. Rostrevor, Orwell Road, Rathgar, Co. Dublin. *Appointed by the Department.*
- M'Donogh, Martin, J.P. Galway. *Appointed by the Department.*
- MacGuire, James P., J.P. Ruskey Dromod, Co. Leitrim. *Appointed by Connacht Provincial Committee.*
- Mercier, Alderman Samuel T., J.P. 2 Mount Clifton, Cliftonville Road, Belfast. *Appointed by Belfast County Borough Council.*
- O Ceallaigh, Seaghan T. 8 Belvidere Avenue, Dublin. *Appointed by Dublin County Borough Council.*

* By Section 24 (2) of the Agricultural and Technical Instruction (Ireland) Act 1899, the President and Vice-President of the Department are ex-officio Members of the Board.

[23]

BOARD OF TECHNICAL INSTRUCTION—Continued.

- Power, Thomas. Dungarvan, Co. Waterford. *Appointed by Munster Provincial Committee.*
- Ryan, Timothy, 125 O'Connell Street, Limerick. *Appointed by Limerick County Borough Council.*
- Sheehan, Most Rev. Richard A., D.D., Lord Bishop of Waterford and Lismore. Bishop's House, John's Hill, Waterford. *Appointed by Waterford County Borough Council.*
- Sisk, Richard. 2 Evergreen Villas, Evergreen Road, Cork. *Appointed by Cork County Borough Council.*
- Starkie, William J. M., M.A., Litt.D., LL.D. Tyrone House, Marlborough Street, Dublin. *Appointed by Intermediate Education Board.*
- Taylor, Alexander. 181A Donegall Street, Belfast. *Appointed by Belfast County Borough Council.*
- Wallace, William, J.P. Greenville, Blackrock, Co. Dublin. *Appointed by Joint Committee of Councils of the Co. Dublin Urban Districts.*

V.—CONSULTATIVE COMMITTEE OF
EDUCATION.

(8 Members.)

- Russell, The Right Hon. T. W., P.C., M.P., Vice-President of the Department. Department of Agriculture and Technical Instruction, Dublin. *Ex-officio.*
- Starkie, William J. M., M.A., Litt.D., LL.D. Tyrone House, Marlborough Street, Dublin. *Appointed by the Commissioners of National Education.*
- Finlay, Rev. T. A., M.A. University Hall, Lower Hatch Street Dublin. *Appointed by the Intermediate Education Board.*
- McClelland, John A., M.A., D.Sc., F.R.S. Rostrevor, Orwell Road, Rathgar, Co. Dublin. *Appointed by the Board of Technical Instruction.*
- Gill, T. P. Department of Agriculture and Technical Instruction, Dublin. *Appointed by the Agricultural Board.*

AGRICULTURE

TABLE showing by Counties the Agricultural Schemes adopted tember, 1913; the amount allocated from the joint fund allocation estimated to be borne by the local rates and the

County.	Itinerant Instruction in Agriculture.	Winter Agricultural Classes.	Poultry.	Butter-making.	Horticulture and Bee-keeping.	Cottage and Farm Prizes.
	£	£	£	£	£	£
Antrim,	(a) 1,425	100	345	100	224	100
Armagh,	470	225	311	—	307	—
Carlow,	308	50	170	80	173	—
Cavan,	330	—	401	110	130	250
Clare,	000	80	260	260	350	336
Cork,	(b) 2,235½	(c) 360	883	264	901	225
Donegal,	345	120	591	148	(d) 596	620
Down,	(e) 695	160	547	322	455	320
Dublin,	380	20	117	—	199	—
Fermanagh,	320	—	360	—	280	100
Galway,	(vi) 758	120	884	210	250	590
Kerry,	605	(g) 140	659	184	210	187½
Kildare,	360	(h) 100	277	102	(i) 406	328
Kilkenny,	605	(j) 180	285	132	259	142
King's,	330	(k) 80	309	92	200	120
Leitrim,	320	40	300	140	190	175
Limerick,	(l) 1,038	(m) 120	424	—	204	186
Londonderry,	340	(n) 200	328	170	226	200
Longford,	343	20	*267	*—	190	71
Louth,	350	75	364	102	216	100
Mayo,	690	(p) 200	663	140	(q) 465	429
Meath,	(r) 810	(s) 100	405	154	227	550
Monaghan,	400	—	345	96	228	160
Queen's,	330	(t) 90	*325	*—	185	120
Roscommon,	600	90	*475	*160	(u) 260	282½
Sligo,	350	40	228	107	210	162
Tipperary (N.R.),	395	(v) 250	290	97	218	130
Tipperary (S.R.),	430	(w) 255	*353	* 25	225	248
Tyrone,	665	(x) 290	325	105	250	290
Waterford,	365	(y) 70	274½	113½	184	45
Westmeath,	(z) 375	30	424	164	185	263½
Wexford,	(1) 705	(11) 120	368	143	299	100
Wicklow,	(12) 402	—	314	102	167	100
Totals,	18,794½	3,695	15,094½	3,734½	9,219	6,630½

* Includes Butter-making.

(a) Includes £1,100 for Antrim Agricultural School, Greenmount.

(b) Includes £100 Special Farm Prize Scheme.

(c) Includes £50 Boy's Scholarships.

(d) Includes £100 for Forestry.

(e) Includes £350 Scholarships to Antrim Agricultural School.

(f) Includes £150 Grant from Henry Trust Fund.

(g) Includes £50 for Boy's Scholarships.

(h) Includes £40 for Boy's Scholarships.

(i) Includes £100 for Student Bells and £33 for School Plots.

(j) Includes £60 for Boy's Scholarships.

(k) Includes £10 for Boy's Scholarships.

(l) Includes £200 for Special Village Scheme, of which £50 is a Grant from Limerick Endowment Fund.

(m) Includes £50 for Boy's Scholarships.

(n) Includes £100 for Scholarships at North West Institute.

[25]

APPENDICES :—

by the several County Committees for the year ended 30th Sep-
for the purposes of each Scheme, and the proportions of the total
Department's contribution respectively.

Live Stock.	Sub- sidies to Owners.	Flax.	General Affin- ities, includ- ing payments salaries and expenses	Total Allocation	Estimated Alloca- tion as between Department's Grants and Rates		Rates raised.
					Department	Rates	
£	£	£	£	£	£	£	£
1,160	285	—	405	4,144	2,373	1,771	(iv) 1,812
655	120	—	355	2,533	1,435	1,098	(iv) 1,112
240	80	—	180	1,301	872	429	660
885	194	—	308	2,409	1,491	969	1,106
750	210	—	274	3,320	2,324	896	(iv) 979
1,725	725	50	680	8,165	5,770	2,334	(v) 2,144
842	300	—	395	3,955	2,368	1,587	1,294
1,398	385	—	590	(i) 4,667	2,547	(i) 2,120	(iv) 2,116
684	167	—	295	1,772	1,218	554	(v) 828
545	155	20	215	2,015	1,349	666	950
905	250	—	270	4,147	3,186	961	1,800
1,010	170	—	260	3,505	2,876	819	1,177
595	144	—	400	2,622	1,625	997	1,427
725	209	—	350	2,037	1,630	1,307	1,428
434	125	—	340	2,000	1,145	835	961
370	80	—	178	1,791	1,385	406	579
885	200	—	320	3,377	2,024	1,353	(v) 981
730	205	—	325	2,754	1,644	1,140	1,236
315	120	—	(o) 210	1,541	1,037	504	636
344	84	—	250	1,925	1,163	762	990
745	213	—	360	3,005	2,914	991	1,277
790	223	—	360	3,619	2,099	1,520	1,542
568	162	100	255	2,316	1,388	928	1,060
465	137	—	245	1,930	1,255	675	1,070
575	160	—	280	2,882	1,943	939	1,260
420	120	—	330	1,867	1,220	647	880
555	75	—	325	2,342	1,416	924	1,071
888	240	—	350	2,994	1,897	1,107	1,541
1,090	300	—	420	3,695	2,317	1,378	1,743
604	105	—	305	2,066	1,496	570	1,082
650	170	—	335	2,446	1,480	1,016	1,298
805	277	—	330	3,257	1,883	1,374	1,484
504	144	—	281	2,044	1,278	766	1,100
23,531	6,564	170	10,426	96,054	61,710	34,344	—

- (a) Includes £20 for purchase of Hand Saws.
 (b) Includes £100 for Scholarships at Mount Pelham.
 (c) Includes £25 for Demonstration Sucker Beds.
 (d) Includes £200 for Village Prize Scheme and £150 for Agricultural Overseas.
 (e) Includes £100 Scholarships.
 (f) Includes £25 for employment of Redger.
 (g) Includes £40 for Boy's Scholarships.
 (h) Includes £40 for Girl's Scholarships and £25 for Girl's Scholarships.
 (i) Includes £40 for Boy's Scholarships and £25 for Girl's Scholarships.
 (j) Includes £25 for Scholarships at North West Institute.
 (k) Includes £25 for Scholarships.
 (l) Includes £15 for Bacon Drying.
 (m) Includes £20 for Veterinary Dispensaries.
 (n) Includes £20 for Bacon Drying.
 (o) Includes £20 for Boy's Scholarships.
 (p) Includes £20 for Bacon Drying.
 (q) Includes £20 for Bacon Drying.
 (r) Includes £20 for Bacon Drying.
 (s) Includes £20 for Bacon Drying.
 (t) Includes £20 for Bacon Drying.
 (u) Includes £20 for Bacon Drying.
 (v) Includes £20 for Bacon Drying.
 (w) Includes £20 for Bacon Drying.
 (x) Includes £20 for Bacon Drying.
 (y) Includes £20 for Bacon Drying.
 (z) Includes £20 for Bacon Drying.

RETURN showing the Number of Instructors, &c., employed in each County in connection with Agricultural Schemes during the year 1912-1913.

County.	Agriculture.	Teachers of Agricultural Classes.	Poultry-keeping only.	Poultry-keeping and Butter-making.	Butter-making only.	Horticulture only.	Horticulture and Bee-keeping.	Bee-keeping only.
Antrim, . . .	1	-	-	1	-	-	1	-
Armagh, . . .	1	1	1	-	-	-	2	-
Carlow, . . .	1	-	-	1	-	-	1	-
Cavan, . . .	1	-	1	-	1	-	-	1
Clare, . . .	2	-	1	-	2	-	1	-
Cork, . . .	5	-	2	-	2	-	3	-
Donegal, . . .	1	-	-	2	-	-	1	-
Down, . . .	1	-	-	2	-	-	2	-
Dublin, . . .	1	-	1	-	-	-	1	-
Fermanagh, . . .	1	-	1	-	-	-	1	-
Galway, . . .	2	-	-	2	1	-	1	-
Kerry, . . .	2	-	-	2	-	-	1	-
Kildare, . . .	1	-	-	1	-	-	1	-
Kilkenny, . . .	2	-	-	1	-	1	-	1
King's, . . .	1	-	-	1	1	-	1	-
Leitrim, . . .	1	-	-	-	-	-	1	-
Limerick, . . .	2	-	1	-	-	-	1	-
Londonderry, . . .	1	-	1	-	1	-	1	-
Longford, . . .	1	-	-	-	-	-	1	-
Louth, . . .	1	-	1	-	1	-	1	-
Mayo, . . .	2	-	-	1	1	-	2	-
Meath, . . .	1	-	1	-	1	-	1	-
Monaghan, . . .	1	-	1	-	1	-	1	-
Queen's, . . .	1	-	-	1	-	-	1	-
Roscommon, . . .	2	-	-	1	-	-	1	-
Sligo, . . .	1	-	1	-	-	-	1	-
Tipperary (N.R.)	1	-	-	1	-	-	1	-
" (S.R.)	1	-	-	1	-	-	1	-
Tyrone, . . .	2	-	-	1	-	-	1	-
Waterford, . . .	1	-	-	1	-	-	1	-
Westmeath, . . .	1	-	1	-	1	-	1	-
Wexford, . . .	1	-	1	-	1	-	1	1
Wicklow, . . .	1	-	-	1	-	-	1	-
	45	1	15	21	14	1	36	3

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.ROYAL COLLEGE OF SCIENCE, DUBLIN.
Session 1912-13.SCHOLARSHIPS IN AGRICULTURE, HORTICULTURE,
FORESTRY AND CREAMERY MANAGEMENT.

A limited number of scholarships will be offered in 1912 for competition among young men in Ireland who desire to acquire a thorough knowledge of Technical Agriculture, and, in addition, one or more scholarships will be provided for students who intend to specialise in either Horticulture, Forestry, or Creamery Management. Each scholarship includes—(1) free admission to the first year's course of instruction in the College, (2) one third-class railway fare to Dublin at the beginning of the session, and one third-class fare from Dublin at the end of the session, and (3) either of the following at the option of the Department—(a) a maintenance allowance of one guinea per week while in attendance at the Royal College of Science or elsewhere, as the Department may decide; or (b) free board and residence at one of the Department's institutions; in the latter case a small grant will be made to each student towards the cost of books and apparatus.

A scholarship is tenable for one year, but selected candidates must undergo a probationary course of one term of about three months. If satisfactory progress be made by the holder, the scholarship may be renewed for a second, a third, and a fourth year, to enable the student to complete his course.

The Department do not undertake to employ, or find employment for, students at the close of the period of training.

Holders of these scholarships will be subject to the regulations made from time to time at the Royal College of Science, and will be required to devote their whole time to the course of study prescribed for them by the Department.

Candidates, who should be between 18 and 30 years of age on the 1st September, 1912, must make application on a form, which may be obtained from the Secretary, Department of Agriculture and Technical Instruction, Dublin, or the Registrar, Royal College of Science, Dublin, after the 1st February, 1912, and which should be returned not later than the 31st July, 1912.

Candidates must have been born in Ireland or have been resident in Ireland for three years immediately prior to the 1st September, 1912.

Past and present students of the Royal College of Science for Ireland are ineligible as candidates.

The examination will take place in Dublin, on the 14th, 15th, and 16th August, 1912. No expenses in connexion with attendance at this examination will be allowed.

Candidates will be tested in the following:—

A.—ENGLISH.

- (1) Composition—to be tested by an essay.
- (2) Grammar—Etymology, and the principles of Syntax.
- (3) Literature—the following works:—(a) Burke, "Speech on Conciliation with America," edited by F. G. Selby (Macmillan & Co.); (b) Shakespeare, "As You Like It."

B.—One of the following:—

LATIN;
GREEK;
FRENCH;
GERMAN.

In these languages the papers will comprise—

- (1) Passages for translation from the following texts :—

Latin—Caesar, "De Bello Gallico" (Book IV.).

Irish—*scéalaí na hÉigse*, "Céad Céad Céad Spéalaí eile."

French—Erckmann-Chatrian, "L'Invasion."

German—Hauff, "Das Wirtshaus im Spessart."

- (2) Easy passages for translation into English from other texts.

- (3) Questions in Grammar—Accidence and the principal rules of Syntax.

- (4) Short sentences for translation from English.

C.—MATHEMATICS.

- (1) Arithmetic—up to Simple Interest inclusive with Mensuration of simple plane figures and rectangular solids.

- (2) Algebra—to quadratic equations inclusive.

- (3) Plane Geometry—to be tested partly by questions requiring formal proofs of propositions from Euclid I.-III., and easy exercises thereon, and partly by practical problems to be solved by compasses, set squares, and scale of equal parts.

D.—PRACTICAL EXPERIENCE OF ONE OF THE FOLLOWING :—

AGRICULTURE ;

HORTICULTURE ;

FORESTRY ;

DAIRYING AND CREAMERY MANAGEMENT.

Each applicant must have had substantial experience of practical work in connexion with farming, gardening, the management of woodlands, or dairying and creamery management. The examination may be written, oral and practical. The subjects will include all the ordinary work of farms, gardens, woods, or dairies, as practised in Ireland.

N.B.—On no account will a scholarship be awarded to a candidate who fails to attain a high standard in the subject he selects for this portion of the examination ; while excellence in that subject will be taken into consideration in case of deficiency in one or more of the others.

E.—ABILITY TO IMPART INSTRUCTION :—

Gauged by the style of the answers in both the written and the oral examinations.

Candidates who are qualified for scholarships by their examination on the foregoing subjects will be required to submit to an examination by a medical officer appointed by the Department. A scholarship will not be awarded in any case where the candidate is certified to be unfit to undertake the prescribed course of studies.

Last date for receiving applications, 31st July, 1912.

October, 1911.

SCHOLARSHIPS IN AGRICULTURE, HORTICULTURE, FORESTRY AND CREAMERY MANAGEMENT.

1912-13.

At the annual examination held on the 14th, 15th and 16th August, 1912, for Scholarships in Agriculture, Horticulture, Forestry and Creamery Management, tenable at the Royal College of Science, Dublin, ninety-one candidates presented themselves.

[29]

Scholarships in Agriculture were awarded to the following eleven candidates:—

Bourke, Cornelius, Clareon, Ballycoshill, Tharles.
 Coody, Denis, Springfield, Holyroos, Tharles.
 Cuthbertson, Henry S., Albert Agricultural College, Glasnevin.
 Dempsey, John, Connelough, Blackwater, Enniscorthy.
 Douglas, Joseph B., Albert Agricultural College, Glasnevin.
 Hegna, Edmund, Cragwood, Abbeyside.
 Johnston, David P., Crace Hall, Lurgan.
 O'Connor, Patrick J., Albert Agricultural College, Glasnevin.
 O'Donovan, Cornelius, Albert Agricultural College, Glasnevin.
 Rhynehart, John G., Albert Agricultural College, Glasnevin.
 Bourke, John A., Clough, Downpatrick.

Scholarships in Horticulture were awarded to:—

Cumming, Andrew M., Horticultural School, Albert Agricultural College, Glasnevin.
 McKay Robert, Horticultural School, Albert Agricultural College, Glasnevin.

No Scholarships were awarded in Forestry or Creamery Management.

FORM A. 180 (a).
 1912.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
 INSTRUCTION FOR IRELAND.

THE ALBERT AGRICULTURAL COLLEGE, GLASNEVIN, DUBLIN.

Session 1912-13

The Albert Agricultural College is situated on the north side of Dublin in a healthy situation about 170 ft. above the sea level. It is easily reached by train to the Glasnevin terminus, from which it is distant less than a mile. The College consists of a residence for about sixty students, together with a farm, orchard, and gardens, all covering an area of about 180 acres.

The College provides two distinct courses of instruction—one for farmers, the other for gardeners. The former or Agricultural Course occupies in the Department's scheme of agricultural education a position intermediate between the instruction given at the Agricultural Stations and that provided by the agricultural faculty of the Royal College of Science, Dublin. The Horticultural Course is intended for selected pupils who are seeking to qualify for the post of instructor in Horticulture. (For particulars relative to the Horticultural Course see separate leaflet, A. 152a.)

AGRICULTURAL COURSE.

This course is intended for young men who desire a technical and practical knowledge of agriculture, to fit them for entrance to the Royal College of Science, Dublin, for becoming farmers, or for engaging in any other occupation—such as creamery management—which requires technical training in the sciences underlying agriculture. It includes instruction in agriculture in the classroom, farmyard, and fields, supplemented by lessons in dairying, horticulture, poultry management, bee-keeping, and veterinary hygiene. The elements of physics, chemistry, botany, zoology, and entomology are taught so far as is necessary to the proper understanding of the principles underlying the most approved farmyard practice.

Instruction is also given in bookkeeping, surveying, and wood-work, while literature, mathematics, and drawing receive such attention as is found requisite.

Every encouragement is given to the pursuit of athletics and to the development of social intercourse among the students.

The College discussion society meets frequently throughout the session. The papers read before it relate to topics of current interest to the farming community.

The library is supplied with standard works on agriculture, and copies of the best farming periodicals are procured regularly for students' use.

THE STAFF.—The staff consists of Principal, House Masters, Agriculturalists, and teachers of chemistry, botany, zoology, veterinary hygiene, horticulture, dairying, poultry keeping, bee-keeping, and woodwork. A competent Drill Instructor attends twice weekly to see to the physical training of the students.

The Clergy of the different denominations also visit the College weekly to give religious instruction. The domestic comfort and bodily health of the students are under the care of an experienced Matron.

THE SESSION.—The course of study extends over a session of ten months, which for the year 1912-13 will open on Tuesday, the 8th October, 1912, and end on Friday, the 8th August, 1913. There will be two intervals, each of about a fortnight—during which students will return to their homes—one at Christmas and the other at Easter.

COLLEGE DIPLOMA.—The College Diploma is awarded partly on the result of the seasonal examinations and partly on the work done throughout the year. It is of two classes, the first being reserved for those students who add to an intelligent grasp of scientific principles a high standard of skill in practical farm work.

Prizes are given by the Department for progress made, for work done, and for services cheerfully rendered to the common weal. These prizes are awarded after consultation with the Principal, and not merely on marks obtained at the examination.

CONDITIONS OF ADMISSION.—Admission to the College is conditional upon passing the entrance examination and furnishing evidence of good health and character. Only resident students who are prepared to stay the whole session and to take the full curriculum are admitted. They must not be less than 17 nor more than 30 years of age on 1st September, 1912.

The entrance examination will be held in the first week in September, 1912, at four centres situated one in each province. Each applicant for admission will be notified in due course as to the centre at which he will be required to present himself. No expenses will be allowed in respect of attendance.

The subjects included in the examination will be as follows:—

- (1.) *English*, including dictation and composition.
- (2.) *Arithmetic*, including calculations requiring a thorough knowledge of weights and measures, decimal and vulgar fractions, percentages, and interest.
- (3.) *Mathematics*.—The elements of mensuration—lengths, areas, volumes; and algebra to simple equations.
- (4.) *Agriculture*.—The questions on this subject are framed with a view to testing knowledge acquired by practical experience of farm work. No text-book is prescribed or recommended. The examination may be oral as well as written.

FEES.—The fees for tuition, board, residence, laundry, and ordinary medical attendance during the entire session are:—

For students whose parents or guardians derive their means of living mainly from farming in Ireland,	£15
For students other than the foregoing,	£30

The fees are payable to the Principal in two instalments, viz., one of £10 (or £30) on entrance and the balance on 1st February. In addition to the instalment of the fee payable on entrance each student must deposit with the Principal a sum of £3 to cover the cost of repairs to clothing, and of books and stationery. The unexpended balance, if any, of this deposit will be returned at the close of the session.

OUTFIT.—Students are required to provide themselves with a proper outfit, particulars of which will be supplied to candidates successful at the entrance examination.

[31]

APPLICATION FOR ADMISSION.—Application must be made on the prescribed form, to be obtained from—

THE DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERION STREET,
DUBLIN.

Applications will be dealt with in the order of their receipt in the Department's Office. They should be forwarded not later than the 15th August, 1912.

Form A. 155 (a)
1912.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

INSTRUCTION IN FRUIT-GROWING AND GENERAL
GARDENING.

HORTICULTURAL SCHOOL,
ALBERT AGRICULTURAL COLLEGE, GLASNEVIN, DUBLIN.

Session, 1912-13

The course provided at this School is suited for men who have already had experience in fruit-growing and general gardening such as can be obtained by working for four or five years under a fully qualified gardener. In addition to the practical work in the gardens, class-room instruction is given to the students to enable them to understand the scientific principles underlying horticulture.

Applicants for admission to the 1912-13 session must not be less than twenty years of age, or more than thirty years on the 1st October, 1912, in good health, and of strong constitution. They should have received a fair general education, and will be required to produce evidence that they have been employed regularly at garden work. They must have been born in Ireland or have been resident in Ireland for at least three years prior to 1st October, 1912.

Students will be admitted on probation as the result of an examination which will be held in Dublin on the 22nd August, 1912. The subjects included in the examination will be:—

- (1.) English—to be tested by dictation and a short letter.
- (2.) Arithmetic—the first four rules, simple and compound; a knowledge of weights and measures; and percentages.
- (3.) Practical Fruit-growing and Gardening.

A high standard will not be expected in English or arithmetic. The examination in practical fruit-growing and gardening will cover the whole range of these subjects.

No expenses will be allowed to candidates in connection with their attendance at this examination.

Successful candidates will be required to enter on their duties on the 8th October, 1912.

The session will close on the 11th October, 1913. Students may be retained at the School beyond that date, if, in the opinion of the Department, they would profit by an extension of the course.

Students are provided with furnished lodging, including coal and light, and receive an allowance of 14s. per week during their first session and of 16s. per week during their second session. They are required to find their own board.

Students of the Horticultural School are subject to the conditions under which the gardeners at the College are employed.

The Department do not undertake to employ or to procure employment for students at the close of the courses, but the names of those who qualify are sent to County Committees of Agriculture with an intimation

that they are eligible for appointment by such Committees, to instructorships under the Department's Scheme of Instruction in Horticulture and Bee-keeping.

Several men who have passed through the School are now employed by County Committees of Agriculture.

Application to attend the examination must be made on the prescribed form, to be obtained from

THE DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN.

Last date for making application—13th July, 1912.

Form A. 176 (a).

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

FARM APPRENTICESHIPS.

AGRICULTURAL STATION, ATHENRY, COUNTY GALWAY.

Young men who intend to become farmers are admitted to the Station for one year, as apprentices, for a course of practical training in several branches of farming.

Apprentices are admitted without payment of any fee. They are required to take part in all the operations of the fields and of the farmyard. They must perform diligently all work assigned to them by the Farm Manager or his foreman. In winter, class-room instruction is provided in the evenings. This instruction is not intended as a preparation for any examination. It is of such a character as to continue the general education of the apprentices and be useful to them in their future career as farmers.

Applicants for apprenticeships must be not less than seventeen years of age on the date of making application, and each must give an undertaking that it is his intention to become a farmer in Ireland. He must also provide, in his application form, evidence of a sure prospect of obtaining a farm of his own, or bona fide occupation on a farm. Preference is given to applicants from the province of Connaught. It is also a recommendation if the applicant has attended a course of instruction held under the Department's Scheme of Winter Agricultural Classes, or if he produces a Certificate from an Itinerant Instructor in Agriculture that he has taken advantage of the Instructor's lectures and demonstrations and has shown a desire to improve his knowledge of tillage farming.

Applications for apprenticeships may be made at any period of the year. Apprentices are admitted on the 1st November in each year in the order of the receipt of their applications in the Department's offices. The Department do not guarantee admission to any applicant. An apprentice is not retained at the station if he is found unable to perform a fair day's work or to be otherwise unsuitable.

On completion of twelve months at the Station, apprentices whose conduct has been good, and whose work has been done with care and diligence and to the satisfaction of the Farm Manager, receive small payments proportioned to the value of their work. In no case does such payment exceed £10.

OUTFIT.

Apprentices are required to provide themselves with a proper outfit, particulars of which are supplied to applicants when they are being notified of their admission.

A sum of £1 must be deposited with the Superintendent on entrance to cover the cost of repairs to clothes, the purchase of books, stationery, &c. The unexpended balance, if any, of this deposit is refunded on the termination of the apprenticeship.

[33]

APPLICATIONS FOR ADMISSION.

Application for admission must be made on the prescribed form to be obtained from—

THE DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERIDON STREET, DUBLIN.

Form A. 176 (4).
1912.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

AGRICULTURAL EDUCATION FOR YOUNG MEN

Session 1912-13.

FARM APPRENTICESHIPS.

AGRICULTURAL STATION, BALLYHAISE, CO. CAVAN.

Young men who intend to follow the farming profession and who desire to acquire a practical knowledge of its several branches are admitted to the Station as apprentices.

Applicants for apprenticeships must be not less than seventeen years of age on the 1st October, 1912, and each must give an undertaking that it is his intention to become a farmer in Ireland. He must also provide, in his application form, evidence of a sure prospect of obtaining a farm of his own, or bona fide occupation on a farm. Preference is given to applicants from the province of Ulster, especially to those who have attended a course of instruction under the Department's Scheme of Winter Agricultural Classes. It is also a recommendation if the applicant produces a certificate from the itinerant instructor in Agriculture for the County in which he resides that he has taken advantage of the instructor's lectures and demonstrations and has shown a desire to improve his knowledge of tillage farming.

The apprentices are required to reside in Ballyhaise House attached to the Station, where they are under the immediate supervision of the Principal. They must take part, as directed, in all the work of the farm.

The 1912-13 Session will commence on the 8th October, 1912, and close on the 9th August, 1913. It will be divided into two terms, viz., the Winter Term, from the opening of the Session to the 19th March, 1913; and the Summer Term, from 1st April, 1913, to the close of the Session. There will be an interval at Christmas of about a fortnight, during which the apprentices may return to their homes. Apprentices who are required at home for farm work during the spring and summer may leave the Station at the end of the Winter Term.

The course of training includes:—(1) classroom instruction in agricultural subjects which have a direct bearing on farming in Ireland; (2) instruction in subjects of a general educational nature, such as English, arithmetic, bookkeeping, &c., which will be useful to the apprentices in their future career as farmers; (3) practical instruction in all the work of the fields and farmyard in connection with the various seasonable operations and with permanent improvements; (4) lessons in veterinary hygiene and woodwork.

The Winter Term is occupied principally with classroom instruction in agricultural and general subjects. The following subjects are included in the agricultural course:—

Soils, tillages, manures (natural and artificial), seeds, grasses, weeds

treatment of pastures, cropping, management of live stock (including winter dairying), valuation of manures and feeding stuffs, elementary chain surveying, and elementary science, explanatory of the principles underlying ordinary farm practice.

The Summer Term is given almost exclusively to practical outdoor work on the farm.

An apprentice is not retained at the Station if he is found to be unable to do a fair day's work, or to be otherwise unsuitable.

Admission as an apprentice is conditional on passing the entrance examination, and producing certificates of good health and character.

Applicants who have been pupils at Winter Agricultural Classes are exempted from the entrance examination provided their attendance and progress at the Agricultural Classes have been satisfactory.

ENTRANCE EXAMINATION.

The entrance examination for the 1912-13 Session will be held in the first week of September, 1912. Each applicant will receive about ten days' notice of the arrangements for this examination.

The following subjects are included in the examination:—

Arithmetic—Simple calculations requiring a knowledge of weights and measures, vulgar and decimal fractions, and percentages.

English—Dictation, Grammar and Composition.

The examination will be of such a nature as should present little difficulty to a young man who has passed the fifth standard at a National school.

No candidate is admitted as an apprentice whose general education is too backward to admit of his taking advantage of the classroom instruction, or who is, in the opinion of the Department, unsuitable in any other respect for an apprenticeship.

No expenses are allowed to candidates in connection with their attendance at the entrance examination.

FEES.

1. For apprentices whose parents or guardians derive their means of living mainly from farming in Ireland the inclusive fees for tuition, board, residence, laundry and ordinary medical attendance are proportional to the aggregate tenement valuation of their holdings, as follows:—

	For Session.
Where the aggregate valuation does not exceed £20,	£3
Exceeds £20 but does not exceed £40,	£6
Exceeds £40 but does not exceed £100,	£10
Exceeds £100,	£15

2. For apprentices not included in the foregoing classes, £20

These fees are in respect of the Winter Term. No additional fees are required from apprentices who are retained for the Summer Term.

Fees must be paid to the Principal on entrance, and in addition a sum of £1 must be deposited at the same time to cover the cost of repairs to clothes, the purchase of books, stationery, &c. The unexpended balance, if any, of this deposit is refunded at the close of the Session.

FREE PLACES.

A small number of free places provided under the terms of the Anne Hall Bequest are available from applicants from the Counties of Fermanagh and Londonderry. Applications for these places must be addressed in the first instance to the Agricultural Superintendent, Royal Dublin Society, Leinster House, Dublin.

OUTFIT.

Apprentices are required to provide themselves with a proper outfit, particulars of which are supplied to the successful candidates.

[35]

APPLICATIONS FOR ADMISSION.

Application for admission must be made on the prescribed form to be obtained from—

THE DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRISON STREET, DUBLIN.

The applications are dealt with in the order of their receipt in the Department's offices.

Form A. 134 (a). 1912.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

AGRICULTURAL STATION, BALLYHAISE, CO. CAVAN.

SESSION 1912-13.

CREAMERY COURSE.

(Subject to revision.)

Provision has been made at the Agricultural Station, Ballyhaise, for a course of technical instruction for young men who intend to become Creamery Managers.

The course to be held in the year 1912-13 will commence on Tuesday, 8th October, 1912, and will terminate on Friday, 7th March, 1913. There will be an interval of about a fortnight at Christmas.

The following subjects will be included in the course:—Physical Science in relation to Creamery work; Dairy Bacteriology; Dairy Technology; Dairy Engineering; Business Methods.

The course will be particularly suitable for those who have had experience of creamery work.

Students who intend to compete for certificates under the Department's scheme for improvement in the management of creameries will have special facilities for the study of the subjects prescribed for the examination in connection with these certificates which is to be held in March, 1913.

At the close of the technical course at Ballyhaise Agricultural Station a limited number of the best students will be afforded facilities for learning the practice of Creamery Management during the Summer of 1913, in a selected creamery in Ireland. Such students will receive a maintenance allowance at the rate of ten shillings per week, in addition to free instruction, while in attendance at the creamery.

Applicants for admission to the course must be at least eighteen years of age on the 1st October, 1912.

Admission is conditional on passing the entrance examination, producing certificates of good health and character, and paying the specified fee.

Applicants who fulfil the foregoing conditions are admitted in the order in which their applications, on Form A. 134, are received in the Department's offices, preference being given, however, to those who have experience of creamery work.

Students are required to take part, as directed by the Principal, in all branches of the outdoor work of the Station which relate to dairying. They must conform strictly to the disciplinary rules in force at the Station.

ENTRANCE EXAMINATION.

Particulars as to the date of this examination and the place at which it will be held will be notified to each applicant.

The following subjects are included in the examination:—

Arithmetic.—Calculations requiring a knowledge of weights and measures, decimal and vulgar fractions, areas, volumes and percentages.

English.—Dictation, Grammar and Composition.

No expenses will be allowed to candidates in connection with their attendance at this examination.

FEE.

The fee for tuition, board, residence, laundry and ordinary medical attendance during the course will be £10.

The fee must be paid to the Principal of the Station on entrance, and, in addition, a sum of £1 must be deposited at the same time to cover the cost of repairs to clothes, the purchase of books, stationery, &c. The unexpended balance, if any, of this deposit will be refunded at the close of the course.

FREE PLACES.

Free places at the course will be offered to a limited number of *bona fide* managers of creameries or auxiliary creameries of at least three years' standing.

An applicant to whom a free place is granted will be required, like other students, to lodge with the Principal on entrance the fee of £10 and the deposit of £1 above mentioned, but in his case the amount of the fee will be refunded to him at the conclusion of the course. The Department, however, reserve the right to retain the fee if the applicant fails to take full advantage of the course.

OUTFIT.

Students will be required to provide themselves with a proper outfit, particulars of which will be supplied to the successful candidates.

APPLICATIONS FOR ADMISSION.

Application for admission must be made on the prescribed form to be obtained from—

THE DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERION STREET, DUBLIN.

Separate forms of application are prescribed for free places and for paying students.

Applications should be forwarded as soon as possible. The latest date for making application will be in the case of free place students 1st August, 1912, and in the case of paying students 31st August, 1912.

NOTE.—INSTRUCTION IN CHEESEMAKING.

Students who have taken out the 1912-13 Creamery Course to the satisfaction of the Department and who desire instruction in cheese-making will receive preference when apprenticeships at the Cheesemaking Course, to be held at Ballyhaise Agricultural Station from May to October, 1913, are being awarded. The fee for the Cheesemaking Course will be £5.

Form A. 176 (c). 1912

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

AGRICULTURAL EDUCATION FOR YOUNG MEN.

SESSION 1912-13.

FARM APPRENTICESHIPS

AGRICULTURAL STATION, CLONAKILTY, COUNTY CORK

Young men who intend to follow the farming profession and who desire to acquire a practical knowledge of its several branches are admitted to the Station as apprentices.

[37]

The farm is managed by an experienced agriculturist, under whose direction the apprentices are required to take part in all the work of the fields and of the farmyard, whether in connection with seasonable operations or permanent improvements. In the class-room attention is given in the evenings and at other times when out-door work is not pressing, to English, Arithmetic (including Surveying), Book-keeping and Technical Agriculture. This instruction is not intended as a preparation for any examination. It is of such a character as to continue the general education of the apprentices, and be useful to them in their future career as farmers.

Applicants for apprenticeships must be not less than seventeen years of age on the 1st October, 1912, and each must give an undertaking that it is his intention to become a farmer in Ireland. He must also provide, in his application form, evidence of a sure prospect of obtaining a farm of his own, or bona fide occupation on a farm. Preference is given to applicants from the province of Munster, especially to those who have attended a course of instruction under the Department's Scheme of Winter Agricultural Classes. It is also a recommendation if the applicant produces a certificate from the itinerant instructor in Agriculture for the County in which he resides that he has taken advantage of the Instructor's lectures and demonstrations and has shown a desire to improve his knowledge of tillage farming.

The apprentices are required to reside in the buildings attached to the Station, where they are in charge of a house master and matron.

The 1912-13 Session will commence on the 9th October, 1912, and will terminate on the 8th August, 1913. There will be two intervals, each of about a fortnight, during which the apprentices may return to their homes—one at Christmas and the other at Easter.

Admission as an apprentice is conditional on passing the entrance examination, producing certificates of good health and character and paying the required fee according to the scale indicated overleaf.

Applicants who have been pupils at Winter Agricultural Classes are exempted from the entrance examination provided their attendance and progress at the Agricultural Classes have been satisfactory.

An apprentice is not retained at the Station if he is found to be unable to perform a fair day's work, or to be otherwise unsuitable.

ENTRANCE EXAMINATION.

The entrance examination in connection with the 1912-13 Session will be held in the first week of September, 1912. About ten days' notice of the arrangements for this examination will be given to each applicant.

The following subjects are included in the examination:—

Arithmetic—Simple calculations requiring a knowledge of weights and measures.

English—Dictation, Grammar and Composition.

*The examination will be of such a nature as should present little difficulty to a young man who has passed the fifth standard at a National school.

No candidate is admitted whose general education is insufficient to enable him to profit by the class-room instruction, or who is, in the opinion of the Department, unsuitable in any other respect for an apprenticeship.

No expenses are allowed to candidates in connection with their attendance at the entrance examination.

FEES.

1. For apprentices whose parents or guardians derive their means of living mainly from farming in Ireland the inclusive fees for tuition, board,

residence and ordinary medical attendance are proportional to the aggregate tenement valuation of their holdings, as follows :—

	For Session.
Where the aggregate value does not exceed £20,	£3
Exceeds £20 but does not exceed £40,	£6
Exceeds £40 but does not exceed £100,	£10
Exceeds £100,	£15
2. For apprentices not included in the foregoing classes,	£20

Apprentices are notified of the fees payable by them. Fees must be paid to the Principal on entrance, and in addition a sum of £1 must be deposited at the same time to cover the cost of repairs to clothes, the purchase of books, stationery, &c. The unexpended balance, if any, of this deposit is refunded at the close of the session.

OUTFIT.

Apprentices are required to provide themselves with a proper outfit, particulars of which will be supplied to the successful candidates.

APPLICATIONS FOR ADMISSION.

Application for admission must be made on the prescribed form to be obtained from—

THE DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN.

The applications will be dealt with in the order of their receipt in the Department's Offices. They should be forwarded not later than 12th August, 1912.

AGRICULTURAL COLLEGE, MOUNT BELLEW.

SESSION 1912-13.

The College stands in a picturesque and healthy position in the midst of the charming woodland scenery of the Mount Bellew Demesne.

It is under the management of the Franciscan Brothers, who hold the highest testimonials in Practical Agriculture and Agricultural Science.

Laboratories with all modern requirements, and a model farmyard have been built by the Department of Agriculture. There is also a School Museum containing a collection of Irish soils and rocks of agricultural importance.

The farms, gardens, and laboratories afford ample facilities for a thorough course in Technical Agriculture and also in the subjects set out below.

Students are required to take part in all farm operations in the field, farmyard, garden and dairy. They must have attained the age of sixteen years before admission.

The course of instruction at the College includes :—

- 1.—Practical Farming. Every Student is encouraged to take part in all farm operations, and is taught to follow the working of the system of Farming adopted, with interest and profit. Each Student keeps for himself a set of farm books and notes, all outlays and incomes for Farm Operations, Live Stock and Dairy, &c., as if the farm were his own. The final balancing at end of year tells him exactly how the farm paid, what paid best and where losses were sustained, &c.
- 2.—A course of Physics, Chemistry, and Biology explanatory of the natural processes which increase or diminish the returns from farm operations.

[39]

- 3.—Farm calculations, Surveying of Land. Value of Manures and Feeding Stuff.
- 4.—Study of Seeds, Grasses, Woods and Pastures.
- 5.—Use of Natural and Artificial Manures.
- 6.—Management of Live Stock. Winter Dairying.
- 7.—Veterinary Hygiene.
- 8.—Fruit Growing.
- 9.—Bee-keeping.
- 10.—Farm Account-keeping.

TERMS.

A number of Scholarships value £10 each will be awarded this year on the result of a qualifying Entrance Examination in the following subjects :—
(a) English : Dictation, Grammar and Composition ; (b) Arithmetic tested by simple questions, involving a knowledge of weights and measures, proportion, decimal and vulgar fractions of a simple kind, and percentages.

N.B.—The object of this examination is mainly to find out if candidates for scholarships have sufficient ability to profit by the programme of work outlined in the Syllabus. The Examination will be conducted by the Department of Agriculture and Technical Instruction for Ireland. Students who have returned their application forms, duly filled, will be notified as to the time and place of their Entrance Examination. The expenses connected with their attendance at this examination must be defrayed by the candidates.

The Pension for those awarded Scholarships will be £15 payable in advance on day of entrance.

For all others the Pension will be £25, payable in two instalments, £15 on day of entrance, and £10 on the first of the following March. The fee for non-resident students is £5 per year ; payable in advance.

Students are under the supervision of the Brothers at all times, on the farm, in the laboratories, dormitories and recreations.

Each Scholarship Student will be required to give an undertaking that it is his intention to become a Farmer in Ireland, or that he has a good prospect of obtaining occupation on a farm in Ireland.

Students who do not attend punctually on the opening day or do not return on the appointed day after the Christmas and Easter holidays, are liable to have their Scholarships cancelled.

ANTRIM AGRICULTURAL SCHOOL.

Sessions 1912-13.

The School is under the control of the Antrim County Committee of Agriculture and is under the immediate direction of a Sub-Committee which includes representatives of Co. Antrim, Co. Down, and the Governors of the Henry Trust.

The School, which is situated within one mile of the town of Antrim, includes a residence and a farm. The residence provides accommodation for twenty-five students and the staff, in addition to the necessary classrooms, etc., which are fully equipped. The farm extends to 187 acres, of which 130 acres are arable. It will be worked as a mixed tillage farm. Suitable farm buildings have been provided. There is also a large garden and orchard in which instruction in horticulture will be given to the students.

The farm is managed by an experienced agriculturist, under whose direction the students will be required to take part in the work of the fields and of the farmyard, whether in connection with seasonable operations or permanent improvements. Poultry runs of the best type have also been erected, and the students will be given the opportunity of learning the most approved methods of poultry husbandry. Instruction is also given in Veterinary Hygiene, Woodwork and Bee-keeping.

The work at this School is not intended as a preparation for any examination. It is of a character to give the students technical knowledge of agriculture, horticulture, etc., such as will be of use to them in their future career as farmers.

Part of the day will be devoted to technical instruction in the classrooms. The remainder will be spent at practical work on the farm.

Applicants for admission must be not less than 17 years of age on the 1st October, 1912. Each applicant must give an undertaking that it is his intention to become a farmer in Ireland, and he must also produce, in his application form, evidence of a sure prospect of obtaining a farm of his own or some *side occupation* on a farm. Preference will be given to applicants from County Antrim, but six places will be reserved for students nominated by the County Down Committee of Agriculture and Technical Instruction. It will be a recommendation if the applicant produces a certificate from an Itinerant Instructor in Agriculture that he has taken advantage of the Instructor's lectures and demonstrations, and has shown a desire to improve his technical knowledge of farming.

Applicants are required to pass a simple entrance examination, to produce certificates of good health and character, and to pay fees according to the scale set forth below.

All students must reside in the School.

The Session for the year 1912-13 will commence on 8th October, 1912, and terminate in the first week in August, 1913. There will be two intervals, one at Christmas and the other at Easter, during which students may return to their homes. The duration of such intervals will be fixed by the Committee.

FEES.

1. For students from County Antrim whose parents derive their livelihood solely or mainly from farming, the inclusive fees for tuition, board, residence, and ordinary medical attendance are proportioned to the aggregate tenement valuation of the parents' holdings, as follows:—

	Fee per Session.
Where the aggregate annual valuation does not exceed £20,	£3
Exceeds £20, but does not exceed £40,	£6
Exceeds £40, but does not exceed £100,	£10
Exceeds £100,	£15

2. For students from County Antrim who are not sons of Farmers £20

3. Co. Down students to be admitted on the terms arranged by the Down Agricultural Committee

Each applicant will be notified of the fee payable by him. The fee must be paid to the Principal of the School on entrance, and in addition a sum of £1 must be deposited at the same time to cover the cost of repairs to clothing, purchase of books, stationery, &c. The unexpended balance, if any, of this deposit will be refunded at the close of the Session.

OUTFIT.

Each student will be required to provide himself with a proper outfit, particulars of which will be supplied with the notice of admission which will be issued to each approved applicant.

APPLICATION FOR ADMISSION.

Application for admission must be made on the prescribed form, which may be obtained from the Secretary, County Antrim Committee of Agriculture, County Courthouse, Belfast. Applications will be dealt with in the order of their receipt in the County Committee's Office. They should be forwarded not later than 14th September, 1912.

[41]

FORM A. 122 (a)

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

THE MUNSTER INSTITUTE, CORK.

The classes are open to female students only. All students must reside in the Institute, where they are under the supervision of an experienced matron.

The course of training includes :—

- I. The practice of dairy-work. The treatment of milk and the making of butter on a large and on a small scale with the most modern machinery and implements, as well as with the appliances generally used in farm dairies.
- II. Instruction in the feeding and management of cows, calves and pigs; in the keeping of small gardens, and in the manipulation and caring of bees.
- III. Instruction in poultry-keeping. Breeds; their suitability for different purposes and different localities; housing, feeding and management; grading and packing of eggs; hatching and rearing of chickens; fattening, killing, plucking, trussing and preparation for market; trap nesting and keeping of laying records.
- IV. Instruction in domestic work, embracing plain cookery, plain needlework, laundry work, and home nursing.

Four terms, each of about eleven weeks' duration, and commencing, respectively, in January, April, July and October, are held in each year.

Intending students must be between seventeen and thirty-five years of age on the date of their admission to the Institute. They are required to produce certificates of good health and character, and to show that they have received sufficient general education to enable them to follow the course.

Students are eligible for admission to a second consecutive term, if they attain the required standard at the examination at the conclusion of their first term.

Students who have attended two terms, and who desire to qualify for Teacherships or itinerant Instructorships under the Department's programme of Agricultural Education are admitted to a third term provided they attain the required standard at the second terminal examination and satisfying the Department's examiner as to their ability to impart instruction. If their progress during the third term is satisfactory they may be admitted to further training with a view to qualifying for the position of (a) Itinerant Instructor in butter-making and poultry-keeping, under a County Committee of Agriculture and Technical Instruction, (b) Teacher of butter-making and poultry-keeping in a school of Rural Domestic Economy, or (c) Teacher of cookery, laundry work, house-keeping, and plain sewing in a school of Rural Domestic Economy. Attendance at the Institute during at least six terms is necessary to qualify students for admission to the examinations for Instructorships and Teacherships.

Girls who desire to become dairymaids in creameries, and who have attended two terms either at the Munster Institute or at a School of Rural Domestic Economy, will, on attaining the required standard at their second terminal examination be admitted to the third term course at the Institute. On completion of this course a limited number of these pupils will be afforded facilities for learning the practical work of a dairymaid in selected creameries in Ireland. In selecting the pupils to whom these facilities will be offered, regard will be had to (1) their knowledge of dairying as evidenced by their answering at the terminal examination at the conclusion of their course of instruction as third-term students, and (2) their physical suitability for the work of a dairymaid in a creamery. Each selected pupil will receive a maintenance allowance at the rate of ten

shillings per week in addition to free instruction at a creamery for a period of twenty weeks.

The Department do not undertake to employ or to find employment for students on completion of their training.

The fees for tuition, board, residence, laundry and ordinary medical attendance are :—

For the first, second and third terms, £3 3s. per term.

For the fourth and subsequent terms, £6 6s. per term.

The above fees apply only to students—

(a) Of Irish birth or parentage,

(b) Who have resided continuously in Ireland for not less than one year immediately prior to the date of their admission,

who satisfy the Department as to their intention to reside in Ireland after being trained at the Institute.

The fee for all other students is £12 12s. per term.

Application for admission must be made on the prescribed form which can be obtained from—

THE SECRETARY,

DEPARTMENT OF AGRICULTURE AND

TECHNICAL INSTRUCTION FOR IRELAND,

UPPER MERIDON STREET, DUBLIN.

FORM A 255 (a)

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

THE ULSTER DAIRY SCHOOL, COOKSTOWN, CO. TYRONE.

The School is situated on an extensive tillage and dairy farm about three miles from Cookstown Railway Station. It is provided with the most modern equipment for the teaching of the several subjects included in the programme.

The classes are open to female students only. All students must reside in the School, where they are under the supervision of an experienced matron.

The course of training includes :—

- I. The practice of dairy-work. The treatment of milk and the making of butter on a large and on a small scale with the most modern machinery and implements, as well as with the appliances generally used in farm dairies.
- II. Instruction in the feeding and management of cows, and in farm-yard lore.
- III. Instruction in poultry-keeping. Breeds; their suitability for different purposes and different localities; housing, feeding and management; grading and picking of eggs; hatching and rearing of chickens by natural and by artificial methods; fattening, killing, plucking, trussing and preparation for market; trap nesting and keeping of laying records.
- IV. Instruction in domestic work, embracing plain cookery, plain needle-work, laundry work and home nursing.

Four terms, each of about eleven weeks' duration, and commencing, respectively, in January, April, July, and October, are held in each year.

Intending students must be between seventeen and thirty-five years of age on the date of their admission to the School. They are required to produce certificates of good health and character and to show that they have received sufficient general education to enable them to follow the course.

Students are eligible for admission to a second consecutive term, if they attain the required standard at the examination at the conclusion of their first term.

Students who have attended two terms and who desire to qualify for

[48]

Teacherhips or Itinerant Instructorships under the Department's programme of Agricultural Education are admitted to a third term provided they attain the required standard at the second terminal examination and satisfy the Department's examiner as to their ability to impart instruction. If their progress during the third term is satisfactory they may be admitted to further training with a view to qualifying for the position of (a) Itinerant Instructor in Butter-making and Poultry-keeping under a County Committee of Agriculture and Technical Instruction, (b) Teacher of Butter-making and Poultry-keeping in a school of Rural Domestic Economy, or (c) Teacher of Cookery, Laundry work, House-keeping and Plain Sewing in a school of Rural Domestic Economy.

Girls who desire to become dairymaids in creameries and who have attended two terms either at the Ulster Dairy School or at a School of Rural Domestic Economy, will, on attaining the required standard at their second terminal examination, be admitted to the third term course at the Ulster Dairy School. On completion of this course a limited number of these pupils will be afforded facilities for learning the practical work of a dairymaid in selected creameries in Ireland. In selecting the pupils to whom these facilities will be offered, regard will be had to (1) their knowledge of dairying as evidenced by their answering at the terminal examination at the conclusion of their course of instruction as third-term students, and (2) their physical suitability for the work of a dairymaid in a creamery. Each selected pupil will receive a maintenance allowance at the rate of ten shillings per week in addition to free instruction at a creamery for a period of twenty weeks.

The Department do not undertake to employ or to find employment for students on completion of their training at the School.

The fees for tuition, board, residence, laundry and ordinary medical attendance are:—

For the first, second and third terms,	£3 2s. per term.
For the fourth and subsequent terms,	5s 6s. per term.

The above fees apply only to students—

(a) Of Irish birth or parentage;

(b) Who have resided continuously in Ireland for not less than one year immediately prior to the date of their admission, who satisfy the Department as to their intention to reside in Ireland after being trained at the School.

The fee for all other students is £12 12s. per term.

Application for admission must be made on the prescribed form, which can be obtained from—

THE SECRETARY,

DEPARTMENT OF AGRICULTURE AND

TECHNICAL INSTRUCTION FOR IRELAND,

UPPER MERRION STREET, DUBLIN.

Form A 135 (b.)

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SCHOOL OF RURAL DOMESTIC ECONOMY,
CONVENT OF ST. LOUIS, RAMEGRANGE, COUNTY WEXFORD.

The school is open to female students over sixteen years of age without restriction as to religious denomination.

The course of training is intended to qualify the pupils to perform efficiently the work of rural life, and includes—Dairying, Poultry-keeping, Horticulture, Household Management, Cookery, Laundry-work and Needle-work. Instruction in English, Arithmetic, Book-keeping, Elementary Science, and Chemistry is also provided.

The school year extends from September to August, and is divided into two sessions, which begin, respectively, in September and in March.

Thirty places for resident students are provided by the Department. The fee for tuition, board and lodging during one session, payable by the holders of these places, is £3, and applicants are required, before admission to the school, to produce certificates of good health and character, and to pass an examination in the elements of English and Arithmetic. The fee payable by resident pupils other than holders of these places is £10 per session. Day pupils are admitted at a fee of £1 per session. Fees must be paid to the Manager on Entrance.

Pupils whose conduct and progress during their first session are satisfactory are eligible for admission to a second consecutive session.

Application for admission as a resident student must be made on the prescribed form, which can be obtained from

THE SECRETARY,

DEPARTMENT OF AGRICULTURE AND

TECHNICAL INSTRUCTION FOR IRELAND,

UPPER MERION STREET, DUBLIN.

Applications for the admission of day pupils should be made to the Manager at the school.

Form A 135 (d).

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SCHOOL OF RURAL DOMESTIC ECONOMY,
ST. MARY'S CONVENT OF MERCY, FORTUMINA, CO. GALWAY.

The school is open to female pupils over sixteen years of age without restriction as to religious denomination.

The course of instruction is intended to qualify the pupils to perform efficiently the work of rural life, and includes—Dairying, Poultry-keeping, Horticulture, Household Management, Cookery, Laundry-work, and Needle-work.

The school year extends from the beginning of September to the end of July, and is divided into two sessions, which begin, respectively, in September and in March.

Intending pupils are required to produce certificates of good health and character. They will not be admitted unless they have received sufficient general education to enable them to follow the course.

RESIDENT PUPILS.

A number of places for resident pupils are provided by the Department. Applicants for admission to these places must be between sixteen and thirty-five years of age.

The fee for tuition, board and lodging during one session, covering a period of about twenty-four weeks, is £3 2s., and is payable to the Manager by each pupil on entrance.

Pupils whose conduct and progress during their first session are satisfactory are eligible for admission to a second consecutive session on payment of the above-mentioned fee.

Application for admission must be made on the prescribed form, which can be obtained from—

THE DEPARTMENT OF AGRICULTURE AND

TECHNICAL INSTRUCTION FOR IRELAND,

UPPER MERION STREET, DUBLIN.

DAY PUPILS.

Applications for the admission of day pupils should be made to the Manager at the School. No fees are payable by day pupils.

NOTE.—The conditions of admission to the Schools of Rural Domestic Economy at Clifden, Co. Galway, and at Claremorris, Swinford and Westport, Co. Mayo, are similar to those indicated for Portumna School.

[45]

FORM A. 135 (7).

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SCHOOL OF RURAL DOMESTIC ECONOMY.
KILLESHANDRA VILLAGE INSTITUTE, COUNTY CAVAN.

The School is open to female pupils over fifteen years of age, without restriction as to religious denomination.

The course of instruction is intended to qualify the pupils to perform efficiently the work of rural life. It includes Household Management, Cookery, Laundry-work, and Needle-work. Attention is also given to Dairy-work and Poultry-keeping.

Intending pupils must undertake to attend regularly and punctually. They may be required to produce certificates of good health and character and to show that they have received sufficient general education to enable them to follow the course.

The school year is divided into two sessions which begin, respectively, in August and February.

RESIDENT PUPILS.

Arrangements have been made which admit of five pupils being boarded and lodged at the School. The girls to whom residential places are awarded are selected by the Manager, subject to the approval of the Department.

Pupils, whose conduct and progress during their first session are regarded by the Department as satisfactory, are eligible for admission to a second consecutive session.

DAY PUPILS.

Classes for day pupils are held each week day (Saturday excepted), from 11 a.m. to 5 p.m.

In the case of persons, such as mothers of families, who are too much occupied with their household work to attend regularly throughout the session, arrangements will be made to admit of their attending any one course or separate lessons, without fee.

FEES.

The fees are proportioned to the valuation of the holdings of the pupils' parents or guardians, as follows:—

A. FOR DAY PUPILS.

Where the valuation does not exceed £20	3s. 6d. per session.
Where the valuation exceeds £20 but does not exceed £40	5s. 0d. " "
Where the valuation exceeds £40	7s. 6d. " "

B. FOR RESIDENT PUPILS.

Where the valuation does not exceed £20	£2 " "
Where the valuation exceeds £20 but does not exceed £40	£3 " "
Where the valuation exceeds £40	£4 " "

Applications for admission should be made to

THE DOMESTIC ECONOMY INSTITUTE,

THE INSTITUTE,

KILLESHANDRA.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SCHOOL OF RURAL DOMESTIC ECONOMY, LOUGHGLYNN,
CO. ROSCOMMON.

This School has been established in order to provide the women and girls of the neighbourhood with such practical training as will enable them to increase the comfort of their homes and improve generally the condi-

tions under which they live. The particular object of the Department in promoting this type of instruction in rural districts in Ireland is to inculcate respect and affection for the home and the countryside, and thereby counteract the tendency to despise farm work and abandon rural life. The training aims at making efficient housewives. It does not aim at the preparation of girls for domestic service or for the factory or the shop.

The course of instruction comprises :—

Dairying.—Including the making of cheese as well as butter ; and the caring and feeding of cows and calves.

Poultry-keeping.—The rearing and management of hens, ducks, turkeys, and geese.

Pig-rearing.—The feeding and general management of pigs.

Gardening.—The cultivation of such vegetables, fruits, and flowers as may be grown in the cottage garden.

Bees-keeping.

Sewing, Knitting, and Mending.—Including the making and repairing of garments of every kind worn in the district.

Washing and Ironing.

Cooking.—The preparation, with inexpensive and simple utensils, of those dishes for which the materials are furnished by the products of the farm and the garden. Open hearths are used.

The Cleansing and decoration of the home.

Home Industries which can be carried on in time not required for the farm or the household, such as lace-making, embroidery, carpet weaving, the making of artificial flowers, etc.

The School is open to all who wish to enter, without restriction as to religious denomination. No fees are payable ; the only conditions which the pupils must fulfil are that they should be more than fourteen years of age and reside sufficiently near the School to permit of their returning daily to their homes.

In order to give the lessons direct, practical application to the home life of the people, the pupils are required to bring with them to the School, so far as may be practicable, the materials needed for their work—the cream or milk for dairy practice ; the poultry to be killed or dressed ; the materials for the dishes to be cooked ; the cloth for new garments ; the clothing to be repaired, washed or ironed. The pupils take home with them in the evening the products of their day's labour, which serve as object lessons to those who cannot be present at the classes.

Housewives, and others in the neighbourhood who are not in a position to attend the classes daily, are at liberty to avail themselves of the instruction in any subject, and to come to the School for advice whenever they desire it in connection with their home work ; and the teachers are prepared to visit the homes of persons who desire their guidance in the difficulties of household management.

Form A 181 (a). 1912.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

FORESTRY INSTRUCTION.

A limited number of apprenticeships in Forestry will be awarded on the result of an examination which will be held in Dublin on the 5th September, 1912.

Applicants for apprenticeships must be not less than eighteen years of age and not more than twenty-five years on the 1st October, 1912. They should be in good health, and of strong constitution, and have received a fair general education. Preference will be given to those applicants who have had experience of work in woods.

[47]

The subjects included in the examination will be—

English—to be tested by dictation and a short letter.

Arithmetic—the first four rules, simple and compound; a knowledge of weights and measures, proportion, percentages, and of the elements of the mensuration of lengths, areas and volumes.

No expenses will be allowed to candidates in connection with their attendance at this examination.

The successful candidates will be required to work under the directions of a skilled foreman, for at least one year, in one of the woods belonging to the Department. During this period apprentices will be given facilities for improving their general education. Apprentices who acquit themselves in such a manner as to lead the Department to believe that they are likely to make suitable foresters may, at the end of this period, be selected to attend a further course of instruction at Avondale Forestry Station, Rathfrum. The duration of the course at Avondale may extend from one to two years, and in addition to class-room instruction apprentices will be required to take part in the work of the woods attached to the station or in such other woods belonging to the Department as may be decided on from time to time.

Apprentices will be required to enter on their duties on the 1st October, 1912.

Each apprentice will receive during the first year an allowance at the rate of 14s. per week, with furnished lodging. When in receipt of this allowance the apprentices will be required to find their own board. Such apprentices as are selected to attend at Avondale station for a further period of training will be provided with free board, lodging and education and receive allowances at the rate of 5s. per week.

Apprentices must undertake to conform with the rules and regulations made from time to time in connection with their work in the Department's woods and at the Forestry station.

The engagement between apprentices and the Department may be determined at any time by one week's notice on either side.

The Department do not undertake to employ or to procure employment for apprentices on completion of their training.

Applications for apprenticeships must be made on the prescribed forms to be obtained from—

THE DEPARTMENT OF AGRICULTURE
AND TECHNICAL INSTRUCTION,
UTTER MERION STANKEE,
DUBLIN.

Last date for making application—22nd August, 1912.

FORM A. 169 (a).

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.
FORESTRY.

**NOTICE TO OWNERS OF WOODS AND PERSONS PROPOSING
TO FORM PLANTATIONS.**

The Department are prepared to afford expert assistance to landowners and others who may require advice on such matters as the selection of sites for plantations, suitability of soil, choice of trees, treatment and valuation of existing woods, draining and fencing of woodlands, valuation of timber, growing of osiers, &c.

The Department's Forestry Expert will, so far as time will permit, visit existing woods or lands which it is proposed to plant. In such cases

a fee of £2, to cover part of the Expert's expenses, will be charged when the visit does not entail an absence from headquarters of more than three days. For visits extending over a longer period a special fee may be arranged, but the Department do not guarantee that more than one complete day will be allowed for each visit. If a visit from the Expert is not required, advice will be given by letter free of charge.

The Department are also prepared to facilitate the planting of small areas by placing at the disposal of persons who propose to form plantations the services of any working foresters who can be spared from the Department's woods for a few weeks in the planting season. The wages and travelling expenses of these foresters must be paid by the persons by whom they are employed.

The undermentioned leaflets on forestry subjects have been issued by the Department, and will be supplied to applicants free of charge:—

No. 65.—	Forestry.—	The Planting of Waste Lands.
No. 66.	"	The Proper Method of Planting Forest Trees.
No. 67.	"	Trees for Poles and Timber.
No. 68.	"	Trees for Shelter and Ornament.
No. 70.	"	Planting, Management, and Preservation of Shelter Belt and Hedge-row Timber.
No. 71.	"	The Management of Plantations.
No. 72.	"	Felling and Selling Timber.
No. 73.	"	The Planting and Management of Hedges.
No. 83.	"	Cultivation of Osiers.
No. 94.	"	Cost of Forest Planting.

Applications for visits from the Expert or for the services of skilled planters should be made on the forms provided for the purpose, and will be attended to as far as possible in order of their receipt in the Department's office.

Letters, which need not be stamped, should be addressed to—

THE SECRETARY,
DEPARTMENT OF AGRICULTURE
AND TECHNICAL INSTRUCTION,
DUBLIN.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

UPPER MERRION STREET, DUBLIN,

23rd December, 1912.

No. A. 16807/12.

SIR,

With reference to the Department's circular letter of the 30th April, 1910, No. 8938/10, inquiring to what extent your Council were prepared to adopt a scheme for the acquisition and preservation of woodlands in your County, I have to acquaint you that the Department are now in a position to state that, in cases where County Councils are willing to acquire small woodlands under the terms of the Land Purchase Acts, the Development Commissioners will be prepared to consider applications for annual advances towards meeting the cost of the maintenance and suitable management of such woodlands. Any grants for this purpose will be made on condition (1) that the woodlands shall not be smaller than fifty acres in extent, (2) that the woodlands shall have been certified by the Department to be of local utility and of advantage to the community, and (3) that the question of the continuance of the grant shall come up for consideration at the end of five years.

The Department desire to submit at an early date an estimate of the annual sum likely to be required within the next five years for the maintenance of woodlands which County Councils propose to acquire in the near future. I have, therefore, to request that you will bring this matter

[49]

before your Council as soon as possible with a view to their deciding whether they will adopt a forestry scheme approved by the Department and, if so, the areas which they would propose to acquire and in respect of which they would probably incur expenditure for maintenance and management in the years 1912/13 and 1913/14.

A draft of a proposed county forestry scheme is enclosed herewith, and I have to suggest that the Council should consider the question of adopting a scheme on the lines indicated therein. In the event of the Council deciding to adopt a scheme as suggested, it should be submitted to the Department for approval. The following procedure would also be necessary:—

1. The Council should decide the amount of money they propose to allocate for the purchase of woodlands.
2. The Council should submit to the Department particulars of the areas they propose to purchase. (The Department would supply the Council with information regarding suitable areas (if any) in the County which had come under their notice).
3. On receipt of a complete list of the woodlands which the Council proposed to purchase, the Department would have inspections made and would notify the Council whether purchases would be approved. In approved cases, the Department would furnish the Council with estimates of the cost of maintenance.
4. The Council would then decide finally what areas they would acquire and submit to the Department an application for a grant towards the maintenance of the woodlands.
5. As soon as possible thereafter, the Department would notify the Council whether the grant required for maintenance would be available, and the Council could then proceed to purchase the areas concerned.

I am,
Sir,

Your obedient Servant,
(Sd.) T. P. GILL,
Secretary.

The Secretary,
County Council.

(No. A. 16897/12.)

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND

COUNTY FORESTRY SCHEME.

1. *Forestry Fund.*—For the purpose of this scheme monies may be provided as follows:—

- (a) by a rate of d. in the £, levied in pursuance of the Agriculture and Technical Instruction (Ireland) Act, 1899;
- (b) by a rate of d. in the £, levied pursuant to the provisions of Section 18 (3) of the Irish Land Act, 1909;
- (c) by contributions from the Development Fund towards the cost of maintenance and management of woodlands.

The amount so provided shall be applied in accordance with the provisions of this Scheme and shall be placed on Deposit Receipt or Current Account with the Treasurer of the County Council, bearing interest at the rate of at least £3 per cent. per annum.

2. *Application of Funds.*—The funds available shall be expended by the Council through the County Committee of Agriculture, solely on forestry operations, for the maintenance of woods, and the formation of plantations on lands already vested in or hereafter to be acquired by the Council.

and on the acquisition by the Council, as Trustees under Section 4 of the Irish Land Act, 1903, and Section 15 of the Irish Land Act, 1909, or any amending Act, from time to time as occasion may arise, and the state of the funds may admit, of woods or plantations for preservation and of land suitable for planting with trees.

3. *Powers of County Committee*.—The Council shall delegate to the County Committee of Agriculture and Technical Instruction the duty of carrying out all details connected with the work to be done under this scheme, including the making of all payments and the receiving of all moneys due on account of such work, the appointment of caretaker, working forester, &c.

4. *Appointment of Caretaker, Forester, &c.*—The County Committee may appoint a person or persons resident in the neighbourhood of woods or lands dealt with under this scheme who will be responsible for the caretaking thereof and if necessary the Committee may appoint a trained working forester, whose qualifications have been approved by the Department, who, in addition to acting as caretaker, shall conduct the planting of trees and other forestry operations.

5. *Accounts*.—A special Forestry Account shall be kept by the County Committee of Agriculture, &c., of all receipts and of all expenses, including Land Purchase Annuities, taxes, rates, &c., in connection with woods and lands dealt with under this scheme. Payment of expenses shall be subject to the approval of the Department and shall in the first instance be made out of the joint fund for agricultural schemes at the disposal of the County Committee. On the 30th September in each year the net amount so paid shall be ascertained and as soon as may be after that date an equivalent amount shall be withdrawn by the County Council from the fund mentioned in Clause 1 of this scheme, and the accumulated interest thereof, and lodged to the credit of the Forestry Account of the County Committee, the balance remaining on deposit receipt or current account as provided above.

6. *Functions of Department*.—In all matters connected with the preservation of woods, the formation of plantations and the acquisition of land for the purpose of this scheme, the Council shall seek and act upon the expert advice which the Department will afford them free of charge, and the Council shall not conclude any arrangement for the acquisition of land under this scheme until the terms of such arrangement have first been approved in writing by the Department.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,

UPPER MERION SQUARE, DUBLIN,

2nd August, 1912.

No. A 16102-12

AGRICULTURAL SCHEMES, 1912-13.

Sir,

I have to transmit herewith, for the information of your Committee, the accompanying copies of Agricultural Schemes for the year 1912-13, and to direct attention to the modifications as under which have been made therein.

Scheme No. 1.—Horses.

Clause 11.—In view of the difficulty which has hitherto been experienced in getting the Register of Stallions printed in time for the service season, a List of registered stallions will in future be published in lieu of the Register.

Clause 21 (14).—The owner of a registered stallion must give all nominated mares priority of service over other mares brought to the stallion for service on the same day.

[51]

Clause 22 (6).—At the request of some County Committees a provision has been inserted enabling a County Committee, if they so desire, to defer payment of the greater portion of the nomination fee until a foal is produced in the following year.

Scheme No. 2.—*Cattle*.

Clause 15 (4).—The County Committee may, if they think fit, permit a premium bull to be reserved for the exclusive use of a Cattle Testing Association, formed in accordance with the Department's Scheme No. 20 for the Selection and Registration of Dairy Cows. In such a case the rule prohibiting the selection of two bulls of the same breed to be located within three statute miles of each other will not apply.

Scheme No. 4.—*Loans for Purchase of Stallions*.

Clause 11 (2) reserves to the Department the right to re-purchase a stallion sold under this scheme, provided, however, that this right may not be exercised after the expiration of six months from the date of payment of last instalment of the loan. This provision was inserted in the bond relating to all stallions sold in the year 1911-12.

Scheme No. 6.—*Subsidies to Shows*.

Clause 2.—The Department desire to impress upon Secretaries of County Committees the necessity for taking the necessary steps to secure that societies applying for grants shall comply strictly with the terms of this clause, and thereby obviate delay in having the applications dealt with by the Department.

Clause 4 (4) includes provision of classes for goats at local shows.

Scheme No. 11.—*Poultry*.

Clause 16.—No new station shall be established within three statute miles of an existing approved station in the County.

Clause 19 (8).—If there is sufficient demand for sittings from residents in the County, each applicant should be restricted to one sitting.

Scheme No. 12.—*Tutorial and Practical Classes in Poultry Keeping*.

Clause 2.—Persons under the age of fourteen years shall not be enrolled on the class register.

Scheme No. 9.—*Instruction in Agriculture*.

Clause 2.—An increment of salary, not exceeding £10 in any one year may be granted to an Instructor in Agriculture on re-appointment, provided that his work during the preceding year has been performed to the satisfaction of the Department and that his salary shall not be increased thereby to more than £250 per annum.

Clause 4 (1).—Agricultural Instructors are required to advise farmers as to the planting of forest trees for shelter and ornament, and to report, if necessary, on applications for the Consent of the Department under Section 32 of the Irish Land Act, 1909, to the felling of trees on holdings affected by that Act.

Clause 5. The centres at which Agricultural Instructors are to give lectures during the season should, if possible, be decided upon by the County Committee not later than 15th October, 1912.

Scheme No. 10.—*Winter Agricultural Classes*.

Clause 2 (2). The holding of horticultural demonstrations at the classes must not entail any reduction in the number of hours assigned for the teaching of other subjects.

Clause 3 (2). Classes should commence not earlier than 31st October, 1912, and conclude not later than 15th March, 1913.

Clause 4. County Committees may, if they think fit, (a) prescribe for admission to the classes a minimum age greater than 16 years, or (b) if a sufficient number of students of 16 years of age or over is not available, admit applicants who are not less than 15 years of age on 1st October, 1912.

Clause 5. If the attendance at a class falls below five on three consecutive occasions the class shall be at once discontinued.

Note (2). If scholarships tenable at an Agricultural Station or other approved agricultural school are offered by the County Committee to students of the winter agricultural classes, such scholarships shall be awarded on the results of a competitive examination conducted by the Department.

A detailed syllabus of the course of instruction is appended to the scheme.

Scheme No. 13.—*Battermaking.*

A syllabus for a course of instruction at Battermaking classes has been inserted.

Clause 4. A person under the age of fourteen years shall not be enrolled on the class register.

Scheme No. 14.—*Horticulture and Beekeeping.*

Clause 8. Demonstrations should be held in the evenings, as far as possible. The horticultural demonstration plots should be utilised for this purpose.

Clause 9 (2) enables County Committees, if they think fit, to confine to persons of small means the right to participate in any arrangement made by the Committee with nurseries for the supply of trees, etc., at special prices to residents in the county.

Scheme No. 15.—*Loans for the Purchase of Agricultural Implements.*

The schemes hitherto in operation for the granting of loans for the purchase of horse sprayers and hand separators have been withdrawn, and one general scheme for the purchase of agricultural implements has been substituted. This scheme is intended to apply only to persons of small means who could not reasonably be expected to pay cash for what-ever implements they may require.

A supply of the schemes will be issued to you on receipt of a requisition, which should be made on the accompanying form. It is particularly requested that you will not ask for more copies than can be used profitably during the year.

I am,

Sir,

Your obedient Servant,

T. F. GILL.

Secretary.

LIVE STOCK SCHEMES, 1913.

PREFATORY NOTE.

Attention is directed to the following modifications :—

HORSES.

Clause 11.—In view of the difficulty which has hitherto been experienced in getting the Register of stallions printed in time for the service season, a List of registered stallions will in future be published in lieu of the printed Register.

Clause 21 (14).—The owner of a registered stallion must give all nominated mares priority of service over other mares brought to the stallion for service on the same day.

Clause 22 (8).—If the County Committee so desire, payment of the greater portion of the nomination fee may be deferred until a foal is produced in the following year.

CATTLE.

Clause 15 (4).—County Committees may, if they choose, permit a premium bull to be reserved for the exclusive use of an approved Cow-Testing Association formed in accordance with the Department's scheme (No. 29) for the selection and registration of dairy cows.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SCHEME FOR ENCOURAGING IMPROVEMENT IN THE BREEDS
OF HORSES.

1913.

GENERAL REGULATIONS.

1. The main objects of this scheme are to encourage the improvement of Horse Breeding in Ireland by inducing stallion owners to keep suitable and sound sires of a high degree of excellence, and by inducing farmers to retain their best young mares for breeding purposes. When arranging the details of this scheme to suit local requirements each County Committee of Agriculture and Technical Instruction, or County Committee of Agriculture, as the case may be, hereinafter referred to as the County Committee, is requested to secure to small farmers as large a share of the resulting benefits as is practicable.

2. The sum to be provided by the Department under this scheme for encouraging improvement in the breeds of horses in a county will depend on—(1) the amount provided in aid of the scheme by local authorities, (2) the special needs of the locality, and (3) the proportion which the amount of the local contribution bears to the genuine capacity of the locality to contribute.

In accordance with Section 16 (6) of the Agriculture and Technical Instruction (Ireland) Act, 1899, the Department will not, in the absence of special considerations, apply or approve of the application of money under this scheme in a locality out of which aid is not given either by local authorities or from other local sources.

3. The joint fund available under this and other live stock schemes, comprising the grant from the Department and the money provided locally, will, subject to the approval of the Department, be administered in a county in accordance with the provisions of Clauses 6 and 7.

4. The Secretary of the County Committee, hereinafter referred to as the Secretary, whose appointment for the year and whose duties must first be approved by the Department, shall act as Secretary to the sub-committee for live stock.

5. It will be the duty of the Secretary to submit, for the approval of the Department, all details of schemes proposed for his county.

No action shall be taken by the County Committee towards putting this scheme into operation until the sanction of the Department has been obtained in writing.

6. The County Council should by resolution delegate to the County Committee full powers for the purposes of the Agriculture and Technical Instruction (Ireland) Act, 1899, and that Committee should appoint from among their own members an executive sub-committee for live stock.

No payments, however, in connection with this scheme shall be authorised except by the County Committee.

7. The duties of the sub-committee for live stock will be to frame the details of the live stock schemes for the county in accordance with the conditions of the Department's general scheme, and to act as the executive committee for the administration of such county schemes when they have been approved by the County Committee and by the Department, but the executive sub-committee shall not have the power of authorising any payment in connection with these schemes.

8. The joint fund available under this scheme shall, after the expenses of administration are provided for, be applied solely for nominations of mares.

9. In the event of there not being a sufficient number of registered

stallions in any county for the purpose of this scheme, the Department may provide for such county, under certain conditions to be prescribed by them, by assisting approved applicants, whether individuals or associations, to buy suitable stallions under the Department's scheme of loans for the purchase of stallions.

REGISTRATION OF STALLIONS.

10. Thoroughbred stallions, calculated to produce weight-carrying hunters and high-class harness horses, may be registered for any county in Ireland.

Irish Draught and Half-bred stallions may be registered for any county in Ireland.

All Clydesdale and Shire stallions registered in 1912 may again be offered for registration under this scheme for the particular districts in which they were registered during that year, but no other stallions of these breeds will be accepted for registration in 1913 except for the Province of Ulster, the counties of Dublin and Louth, and the district comprised within a radius of ten miles of the city of Cork.

11. The Department will publish a List of Thoroughbred, Irish Draught, Half-bred, Clydesdale, and Shire Stallions entered on their Register as approved for service under this scheme. Owners of suitable stallions are invited to apply to have their horses placed on the Register, subject to the provisions of this scheme. A stallion to be entitled to a subsidy in the form of nominations, or otherwise, must be registered or accepted for registration in the Department's Register of Stallions for the year 1913.

Copies of the List, when published, may be had free of charge on application to the Department.

12. (1.) Owners offering their stallions under this scheme must, if required, submit them to inspection and veterinary examination by the Department. Notice of the arrangements as to place and method of inspection will be given.

(2.) Owners of stallions failing to present their animals for inspection on the dates and at the places selected will be liable to have their applications cancelled by the Department.

(3.) Thoroughbred stallions, to qualify for registration, must be entered in Weatherby's Stud Book. Clydesdale and Shire stallions must be entered in the stud book of their respective breeds. If required the stallion owner or (if the stallion is being purchased with a view to registration in Ireland) the vendor must produce a certificate from the keeper of the stud book to the effect that the stallion offered for registration is entered in the stud book or will duly appear in the next volume.

(4.) No application will be considered in which any particular required in the form of application is not supplied.

(5.) No application will be considered in respect of a stallion foaled in 1911.

(6.) The owner of a stallion accepted under this scheme must agree not to permit that stallion to serve more than fifty nominated mares entitled to its services. This regulation is subject, however, to the conditions stated in Clauses 21 (14), 22 (1), and 23.

(7.) Stallions approved under this scheme will be accepted for particular districts only, and shall not, without the written consent of the Department, be removed to other districts. If a stallion is removed without such consent to a district for which it was not accepted, the name of such stallion will be removed from the Register, and the owner shall forfeit all claim to any monies which may be payable to him under this scheme.

13. Forms of application for the purposes of this scheme may be had from the Department.

One of these forms, accurately filled up in every particular and signed by the owner or his agent, must be lodged in or sent by post so as to reach the offices of the Department not later than the 31st August, 1912.

[55]

An application received between 1st and 30th September, 1912, will not be accepted unless accompanied by a fee of £1. An application received between 30th September and the 30th November, 1912, must be accompanied by a fee of £5.

Applications for registration in respect of stallions already at stud in Ireland will not be accepted after the 30th November, 1912.

14. (1.) Applications in respect of stallions imported into Ireland after the 31st August, 1912, will be considered without fee if received on any date up to the 28th February, 1913. Similar applications in regard to stallions in Ireland which have not previously been used for stud purposes will be considered up to 28th February, 1913, provided they are each accompanied by a fee of £5. The entry of such stallions in the published List for 1913 cannot, however, be guaranteed, but the owners of such stallions will be accorded all the privileges enjoyed by the owners of stallions appearing on the Register.

(2.) A person in Ireland intending to import a stallion or to buy a stallion already located in Ireland is advised not to complete the purchase until he has received formal notice in writing from the Department that the stallion in question will be accepted under this scheme for a particular district. [See Clause 18.]

(3.) The Department will, as far as practicable, supply the service of their Inspectors free of charge to persons in Ireland intending to purchase and import suitable stallions for districts in which there is not a sufficient number of approved stallions for the purposes of this scheme; the stallion, however, must have been seen and provisionally approved by the intending purchaser.

(4.) The vendor of a Pure-bred stallion must, if required, submit a certificate from the Secretary of the stud book to the effect that the animal is entered in the stud book, or will duly appear in the next volume.

15. Stallions may be inspected for their general merit and fitness for the purposes of the scheme. Such inspection shall be carried out by one or more Inspectors appointed by the Department. If the stallion has been to stud, evidence of his fruitfulness, and, where practicable, of the character of his stock, must be produced, if required. Inspection for general fitness, when deemed necessary, shall, as far as possible, precede veterinary examination.

16. (1.) The veterinary examination shall be carried out by one or more qualified Veterinary Surgeons, appointed by the Department.

(2.) No stallion shall be rejected as unsound unless suffering from one of the following diseases:—Cataract, Roaring, Whistling, Ringbone, Sidebone, Unsound Feet, Spavin, Curb, and Shivering.

17. The inspection for general merit and fitness and the veterinary examination of stallions may be dispensed with in cases where evidence of suitability and soundness have been sufficiently established to satisfy the Department.

The Department, however, shall have the right to inspect an accepted stallion at any time.

18. The Department cannot undertake to disclose their reasons for the non-acceptance of any stallion, but with the exceptions hereinafter mentioned the owner of any stallion in Ireland not accepted may have his case reconsidered by one or more referees appointed by the Department. Every notice of appeal must be accompanied by a fee of £5, which will be returned in the event of the appeal being upheld. Notice of appeal must be given in writing within ten days from the date of the letter of rejection.

This privilege shall not extend to cases in which stallions have been rejected on appeal in a previous year or to cases in which stallions are offered under Clause 14 (1 and 2).

19. The Department reserve to themselves the right, without assigning any reason, or without inspection or veterinary examination, to decline to place or retain on the Register any stallion for the purposes of this scheme.

No right of appeal shall lie in the case of stallions rejected under this clause.

20. Any person being the owner, lessor or custodian for the time being of a registered stallion who directly or through any of his agents or employees (a) makes, or promises to make, a gift to the owner of a nominated mare of portion of the service fee, (b) allows a nominated mare to be served by a stallion other than that originally selected by the owner of the mare, or (c) is detected in any other fraudulent practice in connection with this scheme shall have his stallion or stallions struck off the Department's Register, and shall, in addition to any other penalty to which he may be liable by law, be debarred from obtaining any future benefit under the Department's schemes. He shall also forfeit any claim in respect of monies due to him under this scheme.

NOMINATIONS OF MARES.

21. (1.) Upon consecutive dates, and at places to be first approved by the Department, exhibitions of farmers' mares shall be held in each county for the purpose of awarding nominations.

(2.) Wherever practicable, and in order to avoid unnecessary expense, two exhibitions shall be held on one day at two centres, i.e., one in the morning and one in the afternoon.

(3.) The County Committee shall give due notice to farmers in the county of the dates, etc., fixed for such exhibitions by means of posters, advertisements in the local newspapers, circulars, or such other method as may be deemed by the Committee to be the most effective and economical for the purpose.

(4.) The Secretary should send to the Department two copies of each such poster, advertisement, circular or other notice as soon as issued.

(5.) The Secretary shall receive entries for each exhibition on forms to be obtained from him. Each form must be signed by the owner of the mare, who must certify on the form that all the particulars given thereon are correct. Further, if required, this certificate must be attested by a magistrate.

(6.) Mares to receive nominations must be the bona-fide property of farmers resident in the county (with the exception of the case provided for in No. 9 of this clause).

(7.) In order to secure the second of the main objects stated in Clause 1 of this scheme, preference will be given to the best young mares under six years of age.

(8.) Each mare must be the bona-fide property of a farmer, the tenement valuation in aggregate of whose holding or holdings, wherever situated, and for which he is rated, does not exceed the limit fixed by the County Committee.

Subject to such conditions as may be prescribed by the Department, herds' mares will be eligible to compete for nominations.

(9.) A farmer who holds land in more than one county may apply for a nomination in any one of these counties provided the aggregate tenement valuation of the holding or holdings, wherever situated, and for which he is rated, does not exceed the limit fixed under (8.) for the county in which he proposes to compete.

(10.) Mares shall be selected by a judge or judges appointed by the Department, and must be passed free from any hereditary disease by a Veterinary Surgeon appointed for that purpose by the Department. The decisions of the judge or judges and of the Veterinary Surgeon as to the suitability and soundness respectively of mares for nominations will be conclusive.

(11.) At each local exhibition all eligible mares not selected for nominations shall be placed on a reserved list in strict order of merit.

(12.) No farmer shall receive more than one nomination, unless the number of mares selected and reserved be insufficient for the granting of the full number of nominations allotted to the county, in which case a second nomination may be awarded.

[57]

(13.) The owner of a registered stallion has a right to require hobbles to be used. Mares can be served only at their owners' risk.

(14.) The owner of a registered stallion must grant priority of service to nominated mares over other mares brought on the same day for service. He may refuse service to mares suffering from a contagious disease; but the reasons for such refusal must be intimated immediately to the Department and to the County Committee by the stallion owner.

22. The County Committee, with the approval of the Department, may—

(1.) subject to the provisions of Clause 10, restrict nominations to any one or more of the breeds of stallions (on the Register);

(2.) refuse a nomination for any mare, without assigning any reason therefor;

(3.) for the purpose of identification, brand all mares selected for nominations;

(4.) require the owner of each nominated mare to deposit a sum not exceeding £2, such deposit to be refunded if the mare is served by the selected stallion or to be forfeited to the Committee in the event of the owner failing without sufficient cause to have the mare served by such stallion;

(5.) make regulations which will render a farmer who, without sufficient cause, fails to send his nominated mare to the selected stallion, ineligible to enter mares for nominations in subsequent years;

(6.) defer payment of the greater portion of the nomination fee until a foal is produced in the following year; and

(7.) make regulations in regard to any other matter under this scheme. All regulations so made shall take effect in the county as if incorporated in this scheme.

23. The term "farmer" is to be understood to mean a person who derives his means of living mainly from farming.

24. (1.) The lists of owners of mares selected for nomination and of mares reserved must be submitted to the Department by the Secretary, within six days after the date of the last exhibition in the county, on the form supplied for the purpose.

(2.) The dockets for the selection of stallions and the service tickets will be supplied to the Secretary, when such form, complete, has been received by the Department. The selection dockets and service tickets shall then be filled in by the Secretary, who shall return them to the Department for the necessary check and authorisation for issue.

(3.) The Secretary, before issuing the selection docket, shall date it.

(4.) The service ticket must not be issued by the Secretary until the owner of the mare has returned to him the selection docket with the name of the selected stallion duly entered thereon by the said owner.

(5.) Not later than the 10th day of August, 1913, the Secretary shall forward to the Department, on the form provided for the purpose, particulars regarding the distribution of such tickets.

25. (1.) A farmer receiving a nomination must select one of the approved stallions in Ireland of the breed named by the County Committee under Clause 22 (1), provided the service list of the stallion selected is not already full. See Clause 26 (2).

(2.) Such farmer must insert on the selection docket the name of the stallion by which he wishes to have his mare served and must return said docket so as to reach the Secretary not later than sixteen days from the date of issue of such docket.

He must also transmit with the docket the amount of the deposit, if any, fixed by the County Committee under Clause 22 (4).

26. In any one of the following cases the nomination shall be forfeited and shall lapse:—

(1.) If the farmer to whom a nomination is issued should fail to select a stallion within the sixteen day limit.

(2.) If the owner of the mare is also the owner of the stallion selected

- (3.) If the farmer to whom a nomination is issued should permit his nominated mare to be served by a stallion other than that originally selected.
- (4.) If the nominated mare should die before first service.
- (5.) If the nominated mare should be sold before the date of the first service.
- (6.) If the nomination has been obtained through any misrepresentation.

The Secretary shall cancel and return to the Department the numbered tickets for all such lapsed nominations, and may issue to the owners of mares strictly in the order in which they appear on the reserve list new tickets to be obtained from the Department in lieu of such cancelled tickets.

27. A nomination is not transferable, and is available only for the selected mare.

28. The service season shall be reckoned to begin on the 1st day of March, 1913, and to terminate on the 31st day of July, 1913.

29. Subject to Clause 22 (6) the value of the nomination shall be uniform for the county, but may vary with the breed of stallions selected, and shall not be less than £2, nor more than £3.

30. (1.) When the service fee exceeds the value of the nomination, the excess shall be paid by the owner of the mare to the owner of the stallion at the time of the first service, or at such other time as may be agreed upon between them.

(2.) The owner of the mare shall pay a groom's fee of 2s. 6d. for each nominated mare.

31. (1.) Not earlier than the 1st August, 1913, and not later than the 1st October, 1913, the owner of a stallion shall forward to the Secretary the selection docket and the service tickets for the services effected by his stallion, accompanied by a solemn declaration to the effect that the conditions of service have been duly complied with.

(2.) The form of declaration required under this clause may be had on application to the Secretary.

(3.) The Secretary shall examine and check all these documents, and when satisfied by him as correct shall forward them to the Department.

(4.) Payment of fees or part fees to a stallion owner may not be made until the Department have been satisfied as to the fulfilment of the conditions of this scheme, and have signified in writing their approval of each particular payment.

32. No payment may be made in any of the following cases—

- (1.) Where any erasure or alteration appears on either the selection docket or the service ticket.
- (2.) Where both the selection docket and the service ticket bearing corresponding numbers are not produced.
- (3.) Where a nomination issued in respect of a particular nominated mare is used for another mare, whether nominated or not.
- (4.) Where a nomination has been obtained through any misrepresentation.
- (5.) Where the stallion owner is detected in any fraudulent practice in connection with this scheme.
- (6.) Where service has been effected by a stallion other than that originally selected.
- (7.) Where an owner who received a nomination failed to send his mare for service.
- (8.) Where the owner of a stallion fails without reasonable cause to lodge by 1st October, 1913, with the Secretary, in the manner provided in Clause 31, his claim for payment of nomination fees.

33. (1) Any person who obtains a nomination for a mare and who (a) accepts, or agrees to accept, from a stallion owner portion of the

[59]

service fee, (b) changes nominations, (c) substitutes mares, (d) enters in the name of another person a mare for nomination, or causes or permits his own mare to be so entered, and

(2) Any person detected in any other fraudulent practice in connection with these regulations shall, in addition to any other penalty to which he may be liable by law, be debarred from obtaining any future benefits under the Department's schemes.

34. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

Scheme No. 2

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SCHEME FOR ENCOURAGING IMPROVEMENT IN THE BREEDS
OF CATTLE.

1913.

1. The main objects of this scheme are to improve the dairy and store cattle in Ireland by encouraging the breeding or introduction of pure bred bulls or registered dairy bulls of a high degree of excellence and by inducing associations of farmers or persons of means to purchase high class bulls for the use of small farmers. When arranging the details of the scheme to suit local requirements each County Committee of Agriculture and Technical Instruction, or County Committee of Agriculture, as the case may be, hereinafter referred to as the County Committee, is requested to secure to small farmers as large a share of the resulting benefits as is practicable.

2. The sum to be provided by the Department under this scheme for encouraging improvement in the breeds of cattle in a county will depend on—(1) the amount of money provided in aid of the scheme by local authorities, (2) the special needs of the locality, and (3) the proportion which the amount of the local contribution bears to the genuine capacity of the locality to contribute.

In accordance with Section 16 (6) of the Agriculture and Technical Instruction (Ireland) Act, 1899, the Department will not, in the absence of special considerations, apply, or approve of the application of money under this scheme in a locality out of which aid is not given either by local authorities or from other local sources.

3. The joint fund available under this and other live stock schemes, comprising the grant from the Department and the money provided locally, will, subject to the approval of the Department, be administered in a county in accordance with the provisions of Clauses 6 and 7.

4. The Secretary of the County Committee, hereinafter referred to as the Secretary, whose appointment for the year and whose duties must first be approved by the Department, shall act as Secretary to the sub-committee for live stock.

5. It will be the duty of the Secretary to submit, for the approval of the Department, details of all schemes proposed for his county.

No action shall be taken by the County Committee towards putting this scheme into operation until the sanction of the Department has been obtained in writing.

6. The County Council should by resolution delegate to the County Committee full powers for the purposes of the Agriculture and Technical Instruction (Ireland) Act, 1899, and that committee should appoint from among their own members an executive sub-committee for live stock.

No payments, however, in connection with this scheme shall be authorised except by the County Committee.

7. The duties of the sub-committee for live stock will be to frame the details of the live stock schemes for the county in accordance with the conditions of the Department's general scheme, and to act as the executive committee for the administration of such county schemes when they have been approved by the County Committee and by the Department; but the executive sub-committee shall not have the power of authorising any payment in connection with these schemes.

8. The joint fund available under this scheme shall, after the expenses of administration are provided for, be applied solely in providing premiums for bulls.

9. In exceptional circumstances the Department may, under certain conditions to be prescribed by them, provide for a county either by purchasing bulls on behalf of applicants selected by County Committees under Clause 17, or by granting loans to approved applicants who desire to purchase bulls through the Department.

Applications for loans under this clause should be made—by the selected individuals—directly to the Department not later than 1st March, 1913.

10. Subject to the approval of the Department, premiums may be restricted to one or more breeds of pure bred bulls or registered dairy bulls.

11. Only bulls entered or qualified by pedigree for entry, in the herd books of their respective breeds, or in the Department's Register of Dairy Cattle, shall be eligible for premiums. The owner of a pure bred bull not entered must, if required, produce a certificate from the secretary of the herd book to the effect that the bull is eligible for entry and will duly appear in the next volume. (See Clause 16 (2).) In the case of a registered dairy bull a certificate from the Department must be produced.

12. Bulls of the following ages are eligible to compete for premiums:—

- (1.) Yearlings, calved between 1st September, 1911, and 1st May, 1912;
- (2.) Two-year-olds, calved between 1st September, 1910, and 31st August, 1911;
- (3.) Three-year-olds, calved between 1st September, 1909, and 31st August, 1910;
- (4.) Four-year-olds, calved between 1st September, 1908, and 31st August, 1909.

All bulls must show a high degree of excellence. Two-year-olds, three-year-olds, and four-year-olds which show signs of having been badly cared, or which are not fully developed, will not be selected.

The Department will be prepared to consider applications in a limited number of special cases for the award of premiums to five-year-old bulls.

13. The amount of a premium for a high-class pure bred bull (other than a Galloway, Kerry, Dexter, Welsh, or Ayrshire bull) payable, subject to the regulations of this scheme, at the end of the season shall be not less than £10 nor more than £15. Where special provision for the use of Galloway, Kerry, Dexter, Welsh, and Ayrshire bulls is made with the approval of the Department, the value of the premium shall be £10. In the case of registered dairy bulls the premium shall be £10.

14. The owners of two-year-old, three-year-old, and four-year-old bulls applying for premiums under this scheme must, if required, produce evidence of the fruitfulness of the bulls in the preceding year.

15. (1.) Bulls which were awarded premiums in 1912 will be inspected by the Department prior to the spring shows and sales, at places and on dates of which the owners will be duly advised by the Department.

In no case will an animal be inspected at the owner's residence.

(2.) Owners of such bulls failing to present their animals for inspection on the dates thus notified will not have their cases reconsidered.

(3.) The Department will furnish the County Committee as soon as practicable with a list of bulls which have been passed under this clause as eligible for premiums in 1913.

(4.) The County Committee shall then proceed to select applicants for

premiums for bulls to be selected at any of the shows or sales approved by the Department. In making such selections the Committee shall have regard to the needs of the various districts in the county; provided that no two bulls of the same breed shall be located in the county within three statute miles of each other, unless one of said bulls is with the sanction of the County Committee reserved for the exclusive use of members of an approved cow-testing association formed in accordance with the Department's scheme (No. 20) for the selection and registration of dairy cows.

(5.) A bull provisionally selected for a premium under this clause must stand for service at the same place as in 1912, and unless in exceptional circumstances approved by the Department, the owner will not be allowed to change the premium to a yearling bull.

16. (1.) Bulls, of the ages specified in Clause 12, other than those referred to in Clause 16 (3), shall be selected at the approved spring shows and sales. The provisional selection of bulls for premiums at these shows and sales shall be made by the Department alone.

(2.) Only those pure bred bulls will be inspected for premiums the owners of which have given a written undertaking to the effect that when so required by the Department they will have their provisionally selected bulls duly entered in the herd books of the respective breeds.

(3.) Intending purchasers must make their own selections from the animals passed by the Department.

17. (1.) The County Committee shall, by means of advertisements in the local papers or by posters, invite applications from persons who, if selected, are prepared to keep in districts not provided for in Clause 15 premium bulls to be purchased or exhibited at one or other of the approved shows or sales. Such applications must be made on forms to be obtained from the Secretary.

(2.) A list of such applicants, when selected by the County Committee, shall be forwarded to the Department by the Secretary, on the form provided for that purpose, not later than five days before the show or sale at which the bulls are to be selected.

(3.) The Department's Inspector or Inspectors will attend at the approved shows and sales. They shall not be empowered to recognize applications from any persons attending the shows or sales whose names are not on the list supplied by the Secretary as having been duly selected to keep premium bulls.

(4.) Applicants selected by a County Committee exhibiting or purchasing at one of the approved shows or sales provisionally selected bulls of the breeds approved by the County Committee need not again show these bulls in 1913 for a premium. The granting of a premium to a bull shall not in any way be regarded as affording a right to a premium in a subsequent year.

(5.) As soon as a selected applicant has procured a bull which has been provisionally passed for a premium he should notify the Secretary on a form to be obtained from the latter for the purpose. The Secretary shall thereupon advise the Department on the prescribed form of the particulars as to location, etc., of the bull, and obtain the sanction, in writing, of the Department with the least possible delay.

18. The service season for a premium bull shall not commence until the owner of the bull has notified the Secretary on the form mentioned in clause 17 (5) that he has procured a bull.

The service season for premium bulls shall close on 31st December, 1913.

19. The Secretary shall supply the owner of each premium bull under this scheme with posters, which such owner must undertake to distribute in the district in which the bull is to serve.

20. Each premium yearling bull shall serve not less than thirty cows, and all other premium bulls not less than forty cows each, other than those that are the property of the owner of the bull. The service fee for the number of cows stated shall be 1s. each, inclusive of all charges, but the

County Committee may, if they think fit, fix the service fee at 2s. 6d. per cow, inclusive of all charges, in the case of farmers whose valuation exceeds the minimum limit fixed by the Committee. After the minimum number of cows has been served, the owner may fix such fee as he may desire.

21. The County Committee, with the approval of the Department, may make such regulations as they think necessary with regard to—

- (1) the inclusion or otherwise of four-year-old bulls,
- (2) requiring applicants for premiums to deposit with their application a sum not exceeding £2 in respect of each bull—such deposit to be refunded in case the applicant is not selected by the County Committee or if he procured a premium bull. At the discretion of the County Committee the deposit so made may be forfeited in the event of the selected applicant failing to procure a premium bull
- (3) the number of premium bulls which any one person may keep, provided that no person shall possess two premium bulls unless located at least three statute miles from each other—see Clause 15 (4),
- (4) the place in which a premium bull shall remain during the season for service—see Clause 15 (5),
- (5) requiring the owner of a premium bull not to keep any other bull on the farm on which such premium bull is located,
- (6) the penalties to be imposed upon the owner of a premium bull who fails to take proper care of the animal,
- (7) the number of cows which any one farmer may send to a premium bull,
- (8) requiring owners of premium bulls to exhibit their animals at one of the shows subsidised by the County Committee.
- (9) requiring owners of premium bulls to retain their animals in the district until 1st September, 1913,
- (10) cancelling the award of a premium to a bull which is sold out of the county before it has served the prescribed number of cows,
- (11) the exclusion of pedigree cows from this scheme,
- (12) requiring selected applicants to purchase such premium bulls only as are certified to have passed the tuberculin test, and
- (13) any other matter under this scheme.

All regulations so made shall take effect in the county as if incorporated in this scheme.

22. Each cow shall be the property of a farmer resident in the county, the aggregate tenement valuation of whose holding or holdings, wherever situated and for which he is rated, does not exceed the limit fixed by the County Committee.

Herds, artisans and bona fide agricultural labourers may obtain service for their cows on the same terms as farmers.

23. The term "farmer" is to be understood to mean a person who derives his means of living mainly from farming.

24. The owner of a premium bull shall not, before the stipulated number of cows has been served, reserve the use of the bull for cows the property of any individual. Subject to the provisions of Clauses 15 (4) and 20, cows must be served in the order in which they are presented.

25. The Department reserve the right to brand or mark premium bulls, and to inspect them from time to time.

26. The Department also reserve the right to apply the tuberculin test, at their own expense, to any premium bull—see Clause 21 (12).

27. The owner of a premium bull must satisfy the County Committee that a syringe and disinfecting materials have been regularly used on the bull after each service, in accordance with the instructions given in the Department's leaflet No. 13, on Contagious Abortion in Cattle.

It will be the duty of the Secretary to obtain this information for the Committee, and to notify the Department at an early date of the results of his inquiries.

It will also be the duty of the Secretary to arrange that the owner of each premium bull shall distribute among owners of cows in his district a number of copies of the Department's leaflet No. 13.

28. In the event of infringement of or non-compliance with any regulation of this scheme or of the bull being unable from any cause to complete the prescribed number of services, the Department reserve the right to withhold the premium or any part of it, or in any other way to deal specially with the case, as the circumstances may require.

29. The owner of a premium bull has the right to refuse the use of his bull in any case where he is satisfied that the service would be prejudicial to the animal. The reasons for such a refusal, however, must, immediately on the refusal of the application, be communicated to the County Committee, who may take such action as they think fit subject to the approval of the Department.

30. (1.) Not earlier than 1st September, 1913, and not later than 18th January, 1914, the owner of each premium bull shall forward to the Secretary on the prescribed form a return of the names, addresses, and valuations of the persons whose cows have been served by the bull—(with dates of such services)—at the fee named in Clause 20.

(2.) The Secretary shall examine and check all such forms, and when certified by him as correct shall forward them to the Department.

(3.) As soon thereafter as the Department are satisfied as to the fulfilment of the conditions of this scheme the Secretary will be notified that payment of the premium or part of the premium payable under this scheme may be made to the owner of the bull.

(4.) Any premium not applied for on or before 16th January, 1914, shall be considered as having lapsed.

31. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

Scheme No. 3

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

SCHEME FOR ENCOURAGING IMPROVEMENT IN THE BREEDS OF SWINE.

1913.

Clauses 1 to 7, inclusive, of the Department's Horse and Cattle Schemes, 1913, shall, with the necessary modifications, apply to this scheme.

SWINE.

8. The system to be adopted in connection with this scheme for encouraging improvement in the breeds of swine shall be the provision of premiums for selected boars.

9. Subject to the approval of the Department premiums may be restricted to one or more of the following breeds of swine, viz.: Large White York, Large Black, Large White Ulster.

10. Only boars eligible for entry in the Herd-books of their particular breeds, in the Register of Pigs of the Royal Dublin Society, or in the Register of Ulster Swine established by the Royal Ulster Agricultural Society, shall be eligible for premiums. The owner of a boar selected for a premium must, if required by the Department, have the animal entered in the proper Herd-book or Register as the case may be.

11. Boars belonging to any Society or to any Association of Farmers shall be eligible to compete for premiums; but the premiums shall be paid to the Society or Association, and not to the individuals in whose charge the boars are placed.

12. A boar when inspected for the first year's premium shall be not less than five months nor more than twelve months old. The granting of a

premium to any bear shall not be regarded as affording any right to a premium in a subsequent year.

13. The value of a premium shall not exceed £5 for the first year, and £3 for the second year.

14. Only those bears which were awarded first year premiums in 1912 shall be eligible for second year premiums in 1913. All such bears must show a high degree of excellence. Two-year-old bears which show signs of having been badly cared for or are not fully developed will not be selected.

The owner of a bear selected for a second year premium must produce evidence of the fruitfulness of the bear in the preceding year.

15. A bear which may be awarded a premium in 1913 out of funds administered by any other body shall not be eligible for a premium under this scheme.

16. (1.) Bears which were awarded first year premiums in 1912 will be inspected by the Department at places and on dates of which the owners will be duly advised by the Department.

(2.) Owners of such bears failing to produce their animals for inspection on the dates thus notified will not have their cases reconsidered.

(3.) The Department will furnish the County Committee as soon as practicable with a list of bears which have been passed under this clause as eligible for premiums in 1913.

(4.) The County Committee shall then proceed to select applicants for premiums for young bears. In making such selection the Committee shall have regard to the needs of the various districts in the county, provided that no two bears shall be located in the county within three statute miles of each other.

(5.) A bear provisionally selected for a premium under this clause must stand for service at the same place as in 1912, and unless in exceptional circumstances approved by the Department, the owner will not be allowed to change the premium to a yearling bear.

17. (1.) The County Committee shall by means of advertisements in the local papers or by posters, invite applications from persons who, if selected, are prepared to keep premium bears in districts not already provided for under Clause 16 of this scheme. Such applications must be made on forms to be obtained from the Secretary.

(2.) As soon as a selected applicant has procured a bear which has been provisionally passed for a premium he should notify the Secretary on a form to be obtained from the latter. The Secretary shall thereupon advise the Department on the prescribed form of the particulars as to the location, etc., of the bear, and obtain the sanction, in writing, of the Department with the least possible delay.

18. The provisional selection of bears for premiums will be made by the Department alone at the approved spring shows and sales and at other places to be fixed by the Department, but, save in exceptional circumstances, no inspection for the purpose of this scheme will be made after the 30th June, 1913.

19. The Department, through the County Committee, will as far as practicable assist intending purchasers to secure suitable bears for the purposes of this scheme.

20. The service season for a premium bear shall not commence until the owner of the bear has notified the Secretary on the form mentioned in Clause 17 (2) that he has procured a bear. The service season for premium bears shall close finally on the 31st December, 1913.

21. The Secretary shall supply the owner of each premium bear under this scheme with posters, which the said owner must undertake to distribute in the district in which the bear is to serve.

22. Each first year premium bear must serve not less than 30 sows, and each second year bear not less than 40 sows, other than those that are the property of the owner of the bear. The service fee, inclusive of all charges for this number of sows, shall not exceed 1s. for each sow. After the minimum number of sows has been served, the owner of the bear may fix such fee as he may desire.

[65]

23. The County Committee, with the approval of the Department, may make such regulations as they think necessary with regard to—

- (1.) the breed or breeds of boars to be selected (see Clause 9),
- (2.) the number of premium boars which any one applicant may possess (provided no person shall possess two premium boars unless located at least three statute miles from each other),
- (3.) the place in which the premium boar shall remain during the season for service (see Clause 16 (5)),
- (4.) requiring the owner of a premium boar not to keep any other boar on the farm on which such premium boar is located,
- (5.) the penalties to be imposed upon the owner of a premium boar who fails to take proper care of the animal,
- (6.) the number of sows which any one farmer may send to a premium boar under this scheme,
- (7.) requiring owners of premium boars to exhibit their animals at one of the shows subsidised by the County Committee,
- (8.) requiring owners of premium boars to retain their animals in the district until 1st September, 1913, and
- (9.) any other matter under this scheme.

All regulations so made shall take effect in the county as if incorporated in this scheme.

24. Each sow shall be the property of a farmer resident in the county the aggregate tenement valuation of whose holding or holdings, wherever situated, and for which he is rated, does not exceed the limit fixed by the County Committee.

Herds, artisans, and bona fide agricultural labourers may obtain service for their sows on the same terms as a farmer.

25. The term "farmer" is to be understood to mean a person who derives his means of living mainly from farming.

26. The owner or owners of a premium boar shall not, before the stipulated number of sows has been served, reserve the use of the boar for sows the property of any individual, or of the members of any society. Subject to the provisions of Clause 29, sows must be served in the order in which they are presented.

27. The Department reserve the right to brand or mark premium boars and to inspect them from time to time.

28. In the event of infringement of or non-compliance with any regulation of this scheme or of a boar being unable, from any cause, to complete the prescribed number of services, the Department reserve the right to withhold the premium, or any part of it, or in any other way to deal specially with the case, as the circumstances may require.

29. The owner of a premium boar has the right to refuse the use of his boar in any case where he is satisfied that the service would be prejudicial to the animal. The reason for such refusal must, however, be communicated to the County Committee immediately on the refusal of the application.

30. (1.) Not earlier than 1st August, 1913, and not later than 15th January, 1914, the owner of each premium boar shall forward to the Secretary on the prescribed form a return of the names, addresses, and valuations of the persons whose sows have been served by the premium boar—(with dates of such services)—at the fee named in Clause 22.

(2.) The Secretary shall examine and check all such forms, and when certified by him as correct shall forward them to the Department.

(3.) As soon thereafter as the Department are satisfied as to the fulfilment of the conditions of this scheme, the Secretary will be notified that payment of the premium, or part of the premium, payable under this scheme may be made to the owner of the boar.

(4.) Any premium not applied for on or before the 15th January, 1914, will be considered as having lapsed.

31. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

DEPARTMENT OF AGRICULTURE AND TECHNICAL.
INSTRUCTION FOR IRELAND.

SCHEME OF LOANS FOR THE PURCHASE OF STALLIONS.

1913.

1. Applications for loans for the purchase of Stallions must be made—on the prescribed form (A. 37)—direct to the Department.

2. In considering an application for a loan the Department will have regard to the number of registered Stallions in the district.

No loans will be made save for the purchase of Stallions accepted by the Department under the Horse-breeding scheme for 1913.

The Department reserve the right to refuse any application for a loan without assigning any reason for such refusal.

3. The individual or association (hereinafter referred to as the applicant) applying for a loan must be approved by the Department.

4. The purchase price of the Stallion must be approved by the Department.

5. The applicant must pay to the Department (1) one-third of the approved purchase price, (2) the amount of the stamp duty, and (3) the premium for the insurance of the Stallion against death only at the full amount of the approved purchase price—the payment to the Department of this premium must be secured under conditions similar to those provided for the repayment of principal and interest. (See 7 and 8.)

6. On receipt by the Department of (1) one-third of the agreed on purchase money, (2) the necessary stamp duty, (3) the premium for insurance, and (4) a form of undertaking to have the necessary bond duly completed without delay, the Department will pay to the vendor the full amount of the agreed on purchase price, and will intimate to him that possession of the Stallion may be given up to the applicant.

If the vendor, before being paid by the Department, gives up possession of the Stallion, the Department will hold themselves free of any liability to the vendor.

7. As soon thereafter as possible the applicant, with two or more approved solvent sureties, shall enter into a bond to repay the Department the amount advanced by them—viz., two-thirds of the purchase money—in five equal annual instalments, payable on the 1st November in each year, together with interest at the rate of 2½ per cent. on the outstanding balance. The first instalment shall be payable on the 1st November next succeeding the date of payment by the Department of the full purchase price to the vendor.

8. In the case of an association repayment must be guaranteed by the Committee of the association, or in such other manner as the Department may require.

9. The applicant will be required to observe the following conditions:—

(1) He shall not contract, sell, or otherwise dispose of the Stallion without the previous consent of the Department in writing until all instalments of principal and interest are paid off in accordance with Clause 7, and in any case not earlier than after the expiration of five years from the date of sale to the applicant.

(2) He shall during the period from the delivery of the Stallion until the expiration of six months from the date of payment of the last instalment of the loan, maintain the Stallion in good healthy breeding condition, save only for such accident or illness as may arise or be occasioned by any cause other than the negligence or default of the applicant or his employees.

(3) He shall without delay give notice in writing or by telegram to the Department in the event of the horse (a) becoming ill or lame, (b) meeting with any accident or injury, or (c) dying. In the last case

[67]

a certificate from a Veterinary Surgeon must be furnished at the applicant's expense.

(4) He shall provide proper accommodation for the Stallion, and care it in a proper manner to the satisfaction of the Department.

(5) He shall procure at his own expense the services of a Veterinary Surgeon when necessary.

(6) He shall during the continuance of the loan (a) offer the Stallion each year for registration, (b) conform at all times to the regulations of the Department's Scheme for the time being for encouraging improvement in the breeds of horses, and (c) allow the Stallion to serve nominated mares at a fee to be fixed by the Department, but such fee may not exceed £3 per mare.

In the event of the breach of any of the above conditions, the applicant shall pay to the Department as and for liquidated damages such sum as may be named in the bond by the Department without prejudice to the Department's right to recover with interest the unpaid instalment or instalments of the price of the Stallion.

10. Nominated mares the property of the members of an association purchasing a Stallion under this scheme shall not take priority of service over nominated mares owned by non-members.

As soon, however, as all nominated mares whose owners have selected the Stallion have been served, the service of the Stallion may be retained exclusively for the use of the members of such association.

11. The Department shall have the rights:—

(1) to inspect the Stallion at any time, and

(2) to repurchase the Stallion from the applicant at the price at which the animal was sold to him, provided that this right may not be exercised after the expiration of six months from the date of payment of the last instalment of the loan.

12. Should the Department grant a special subsidy in respect of the Stallion such subsidy shall not be paid to the individual or association in possession of the Stallion, but shall be applied as the Department may determine either in reduction of the price or towards the repayment of the loan.

13. The decision of the Department in all matters relating to these loans shall be final.

Scheme No. 5.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SCHEME OF LOANS FOR THE PURCHASE OF BULLS.

1913.

1. Applications for loans for the purchase of Bulls should be made—on the prescribed form (A. 38)—direct to the Department before 1st March, 1913.

2. No application for a loan for the purchase of a Bull will be considered if coming from a locality in which, in the opinion of the Department, there is already a sufficient number of premium Bulls for the purpose of their scheme. No loan will be granted save for the purchase of a Bull passed by the Department as suitable for a premium. The Bull must be of a breed approved by the County Committee. The Department reserve the right to refuse any application for a loan without assigning any reason for such refusal.

3. The purchase price of the Bull must be approved by the Department.

4. The person applying for a loan under this scheme—hereinafter referred to as 'the applicant'—must purchase through the Department,

who cannot undertake to consider applications for loans in respect of animals purchased without their knowledge, at shows, sales, or from private individuals. The Department will, as far as possible, endeavour to procure a suitable animal for the applicant, but they cannot undertake to supply a Bull at a price fixed by him.

5. Before taking possession of the Bull the applicant will be required to pay to the Department's representative—(1) one-third of the approved purchase price, (2) the stamp duty, and (3) the charge for insurance against death of Bull (see Clause 9). Further, he must sign a form of undertaking to have the necessary form of guarantee for repayment duly signed and completed.

6. As soon thereafter as possible, the applicant and two approved solvent sureties shall sign a form of guarantee to repay to the Department the amount advanced by them in two equal annual instalments, payable on the 1st day of April in each year, the first instalment to be payable on the 1st day of April in the year following that in which the Bull was purchased, together with interest at the rate of 2½ per cent. on the outstanding balance.

7. In the case of an association the person in whose charge the Bull is to be placed must, with two other approved members of the association in their capacity of private individuals, guarantee repayment of the loan.

8. The Bull shall not be sold or otherwise disposed of without the consent of the Department having been previously obtained in writing, until all instalments of principal and interest are paid off in accordance with Clause 6; and in any case not earlier than until the expiration of two years from the date of sale to the applicant. In the event of the applicant contrary to the provisions of this clause selling or otherwise disposing of the Bull he shall pay to the Department as and for liquidated damages the sum of £10 without prejudice to the Department's right to recover with interest the unpaid instalment or instalments of the price of the Bull.

9. The applicant must insure the Bull with the Department against death only for the full amount of the purchase price. The fee for such insurance shall be 3 per cent. on the full amount of the purchase price, and shall be paid to the Department.

10. The Department will insure the Bull with an insurance company for twelve months only from the date of payment of the insurance fee by the applicant. In the event of the death of the Bull before the expiration of the twelve months in question any sum received from the insurance company will be credited to the applicant's loan account. If such sum is more than sufficient to cover the amount of the loan with interest accrued, the surplus will be paid to the applicant.

It will be optional with the applicant to insure the Bull for a second or subsequent years.

11. The applicant will be required to observe the following conditions:—

(1.) He must, without delay, give notice in writing or by telegram to the Department (a) in the event of the Bull getting ill or lame, (b) in the event of any accident or injury occurring to the Bull, and (c) in case of the death of the Bull.

(2.) He must take all reasonable precautions to prevent the Bull from coming into contact with any animal suffering from disease.

(3.) He must provide proper accommodation for the Bull and care it in a proper manner, to the satisfaction of the Department.

(4.) He must procure at his own expense a syringe and disinfecting materials and use same for the washing of his Bull after each service, in accordance with the instructions given in the Department's leaflet No. 13 on Contagious Abortion in Cows.

(5.) He must procure at his own expense the services of a Veterinary Surgeon when necessary.

(6.) In the case of the death of the Bull he must forward a certificate from a Veterinary Surgeon or such other evidence as to the cause or fact of death as the Department may require.

[69]

12. The granting of a loan does not imply that a premium will be awarded in respect of the Bull.

Should the Bull be awarded a premium (1) the person in whose favour the loan is being granted must conform to the regulations of the Department's scheme for the improvement of the breeds of cattle, or any modifications therein made, with the approval of the Department, by the County Committee; and (2) the amount of such premium shall be paid to the applicant, after the provisions of the general scheme have been complied with.

13. The Department shall have the right

(a) to inspect the Bull at any time;

(b) to apply the tuberculin test at their own expense to any Bull purchased under this scheme.

14. The decision of the Department in all matters relating to these loans shall be final.

Scheme No. 6.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SUBSIDIES TO AGRICULTURAL AND INDUSTRIAL
SOCIETIES, ETC.

1912-1913.

1. County Committees of Agriculture may, subject to the approval of the Department and to the conditions of this scheme, grant subsidies to societies established for the purpose of—

(a) Holding Agricultural, Poultry, Horticultural, and Farm Produce Shows; Industrial Shows or Exhibitions and Fairs; and
Skilled Labour Competitions, Implement Trials, Ploughing Matches, etc.

Provided, however, that the grant to any one Ploughing Match shall not exceed £5, irrespective of the number of competitions at such Match.

(b) Obtaining for its members Analyses of Manures and Feeding Stuffs, Seed Tests, etc.

2. (1.) A show society or other body, desiring to obtain a grant under this scheme must make application on the prescribed form not later than 1st February, 1913, to the County Committee, and must at the same time furnish the following particulars in respect of each show held by the society in 1912, viz. :—

(a) A balance sheet duly certified to have been audited and found correct by two persons not being members of the committee of the show society or other body concerned, and setting forth in detail the financial position of the society after all liabilities have been discharged, and also

(b) If required, a list certified by the Secretary of the show society or other body, setting forth the amounts actually collected in local subscriptions from private individuals in 1912.

Any Society or other body which fails to furnish these particulars, or such further information as the County Committee or the Department may require, shall not be eligible to receive a subsidy.

(2.) It shall be the duty of the Secretary of the County Committee, by means of advertisements or otherwise, to invite applications in accordance with the provisions of this scheme, from all societies or other bodies concerned, and to submit same with the necessary particulars to the County Committee as soon as possible, but not later than at a meeting of the Committee held in the month of February, 1913.

(3.) Not later than 1st March, 1913, the County Committee shall forward to the Department the foregoing documents, together with their recommendations as to the distribution of funds available under this scheme.

3. In allocating the funds available under this scheme, County Committees should consider the claims of the various Shows held in the county and the special requirements of particular districts.

The County Committee in allocating a grant to any particular show shall take into consideration :—

- (1.) The amounts actually collected in local subscriptions from private individuals in 1911 and 1912.
- (2.) The total value of prizes awarded in 1912, and the cost of administration.
- (3.) The regard paid by the society to the furtherance of the Department's live stock, poultry, and other county schemes.
- (4.) The amount set aside for classes confined to small farmers.

4. (1.) The prize schedule for 1913 must, prior to publication, be submitted in duplicate through the County Committee to the Department for approval in writing.

(2.) It shall be a condition attached to any grant from the joint fund that stallions which are entered on the Department's Register for the current year shall be exempted from veterinary examination when competing either in reserved or in open classes at a show subsidised by a County Committee.

(3.) In the case of certain show societies to be approved by the Department and the County Committee, portion of the grant from the joint fund shall be utilised in providing classes for Irish Draught mares on the Department's Register, and for the progeny of such mares by registered Irish Draught stallions.

(4.) In the case of live stock shows, other than shows confined to horses, provision must be made in the schedule of prizes for the inclusion of classes for sheep, goats, swine and for poultry of the breeds subsidised by the County Committee.

In dairying districts show societies should make special provision for classes for registered dairy cows and their progeny.

The Department will not consider any schedule which has not previously received the approval of the County Committee.

5. The amount of the joint contribution from the County Committee and the Department must be acknowledged in the prize schedule.

6. Each society receiving a subsidy under this scheme shall, if required, afford all reasonable facilities for the inspection of their books by the Department, and shall admit the Department's Inspectors to the judges' rings during all adjudications on the day of the show.

7. Grants from the joint fund available under this scheme may be given to new show societies, provided the County Committee and the Department are assured :—

- (1.) That there is need for such new societies in the county ;
- (2.) That adequate local support is forthcoming ; and
- (3.) That the rules and financial proposals of the society are deemed satisfactory.

8. The cost of employing judges must be defrayed by show societies out of their own funds. The Department cannot undertake to supply the services of a judge or demonstrator for any show or competition.

If the County Committee approve, one or more of the instructors employed under county schemes may be permitted, for the purpose of giving demonstrations, to attend a show subsidised by a County Committee.

9. (1.) Immediately after the show or competition the Secretary of the Society or other body shall furnish to the County Committee a certificate as to the total amount actually awarded in prizes, exclusive of cups and presentation prizes (the value of which should be stated separately), and the County Committee shall forward such certificate to the Department.

(2.) As soon as the Department are satisfied as to the fulfilment of the conditions of this scheme, the County Committee will be notified that payment may be made to the show society or other body of the full amount of the subsidy or part of the subsidy as the case may be.

(3.) In the event of the total sum actually awarded in prizes at any show or competition being less than the sum originally voted by the County Committee, the show society or other body managing the show or competition shall not be entitled to receive payment from the joint fund of any sum exceeding the amount actually awarded in prizes, exclusive of cups and presentation prizes.

10. Non-compliance with any of the foregoing regulations will render a show society or other body ineligible for a grant under this scheme, and will entail the cancellation of any subsidy proposed to be given by the County Committee to such show society or other body.

11. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

The Department recommend that each Agricultural or other Show Society receiving a subsidy under this Scheme should invite the County Committee to nominate one or more representatives to act on the Show Committee.

Scheme No. 7.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND

PRIZES FOR COTTAGES AND SMALL FARMS, 1913.

1. In 1913 County Committees of Agriculture may, subject to the Department's approval, offer prizes in one or both of the following sections, subject to the provisions of this scheme, viz.:—A. Cottages with gardens; B. Small Farms.

In Section A County Committees may offer prizes in any one of the following ways:—(1) wholly in cash, (2) wholly in fruit trees and seeds, (3) partly in cash and partly in fruit trees and seeds.

A County Committee may delegate the working of this scheme to a society eligible for a grant under the scheme of subsidies to agricultural and industrial societies.

2. Competition in Section A shall be confined to bona fide cottagers as defined by the County Committee. Cottagers on whose holdings demonstration plots in connection with the scheme of instruction in horticulture are situated, shall, however, be ineligible to compete.

Only bona fide farmers who derive their means of living mainly from farming, who reside on their farms and work the farms themselves, will be eligible to compete in Section B. At least one-fourth of the arable land of the entire holding of each competitor in this section must be tillage, first year's grass or meadow being regarded as tillage.

Teachers in National or other primary schools are ineligible to compete under this scheme.

3. For the purposes of this scheme the county may be divided into districts or circuits, in each of which separate competitions will be held.

4. Particulars as to the sections adopted, the number of districts or circuits into which the county is divided, the number of classes in each section, the limits of valuation or acreage fixed by the County Committee for each class, and the number and value of the prizes offered, must be submitted to the Department on the prescribed form for approval.

5. Entries must be made on special forms to be obtained from the Secretary of the County Committee. Each competitor must forward one of these forms, accurately filled up in every detail, so as to reach the Secretary of the County Committee on or before a date to be fixed by the County Committee, but in no case later than the 26th May, 1913.

No holding will be inspected in respect of which the owner fails to fill in an entry form.

It shall be the duty of the County Committee to examine these entry forms and to satisfy themselves, as far as practicable, as to the eligibility of each entrant before the list of competitors is supplied to the judge.

6. In cases of insufficient competition, want of merit, or in which the conditions of this scheme have not been strictly adhered to, the prizes may be withheld in whole or in part.

7. The following points shall be taken into consideration by the judge in making his awards:—

COTTAGE SECTION.

- (a.) Cleanliness and general order of cottage and premises.
- (b.) Cultivation of the garden, including vegetables, fruits, and flowers freedom from weeds, well-kept fences and walks.
- (c.) Arrangement of manure heap.
- (d.) General management and care of live stock, particularly pigs and poultry, special attention to be given to quality and housing.
- (e.) Management of bees.

SMALL FARM SECTION.

- (a.) Cleanliness, order and economy in the dwelling-house and offices (including poultry houses).
- (b.) Judicious character of cropping, efficiency of cultivation, arrangement of manure heap, and provision for utilising liquid manure.
- (c.) Cultivation of the garden, including vegetables, fruits and flowers.
- (d.) general condition of land under grass, care of fences, gates, water courses, etc.
- (e.) Planting of trees for shelter or other purposes.
- (f.) Freedom from weeds, especially grass land, stack-yards and headlands.
- (g.) Cultivation of headlands.
- (h.) Management and care of live stock and poultry (quality to be particularly considered).
- (i.) Special credit will be given if simple accounts of receipt and expenditure in connection with any holding entered for competition (or with any branch of the work on the holding, such as cost of feeding cows or pigs, of rearing calves, of keeping poultry, etc.) are kept and submitted to the judge for inspection.

Marks may also be given for improvements in buildings, reclamation of land, or the keeping of records in connection with the Department's Dairy Cattle Scheme or Poultry-keeping Scheme.

8. The Department will supply, free of charge to the County Committee, the services of an Instructor to act as judge under this scheme.

9. The judge's report shall deal with such matters in connection with the competition as the Department and the County Committee may decide.

10. The inspection of cottages or small holdings entered for competition under this scheme will be made in the months of June, July, or August.

11. The Committee shall submit the judge's report, with list of awards, for consideration by the Department, who, as soon as they are satisfied as to the fulfilment of the conditions of this scheme, will notify the Secretary of the County Committee that the prizes or reduced prizes may be paid. The awards will not be final until the sanction of the Department has been conveyed in writing to the Secretary.

12. The County Committee shall furnish to the Department such detailed statements of expenditure under this scheme as may be required from time to time.

13. In all matters of dispute relating to this scheme the decision of the Department shall be final.

[73]

Scheme No. 8.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

PRIZES FOR FLAX ON FOOT.

1913.

1. County Committees of Agriculture in flax growing counties may, subject to the approval of the Department and to the conditions of this scheme, offer prizes as under for flax on foot :—

(a.) For growers the valuation of whose holding does not exceed £10, and who grow at least half a statute acre of flax or sow at least $\frac{1}{2}$ bag of seed.

(b.) For growers the valuation of whose holding exceeds £10 but does not exceed £25, and who grow at least one statute acre of flax or sow at least $\frac{1}{2}$ bag of seed.

(c.) For growers the valuation of whose holding exceeds £25 but does not exceed £50, and who grow at least two statute acres of flax or sow at least 1 bag of seed.

(d.) For growers the valuation of whose holding exceeds £50, and who grow at least three statute acres of flax or sow at least $1\frac{1}{2}$ bags of seed.

N.B.—The limits of valuation in the foregoing classes are not prescribed; they are merely inserted as an indication to County Committees to encourage the small grower.

2. No action shall be taken by the County Committee towards putting any portion of this scheme into operation until the sanction of the Department to the Committee's proposals has been obtained in writing. The scheme, when sanctioned by the Department, must be considered as final for the year.

3. Competition shall be confined to bona fide flax growers as defined by the County Committee.

4. The County Committee shall, by means of advertisements in the local papers and by posters, invite applications on special forms from persons in the county desirous of competing for the prizes offered under this scheme. Copies of these posters must be forwarded to the Department.

5. For the purpose of this scheme the county may be divided into districts, in each of which separate competitions may be held, provided that a competitor in one district shall not be eligible to receive a prize in another district of the county during the same season.

6. The County Committee may require an entry fee from each competitor.

7. Particulars as to the number of districts into which it is proposed to divide the county, the limits of valuation or acreage for each class, the number and value of prizes for each class, and the amount of the entry fee, if any, to be charged, shall be submitted not later than 31st March on the prescribed form for approval by the Department.

8. Entries must be made on special forms to be obtained from the Secretary of the County Committee. Each competitor must forward one of these forms, accurately filled up in every detail, so as to reach the Secretary of the County Committee on or before a date to be fixed by the County Committee, but in no case later than the 28th May, 1913.

No crop will be inspected in respect of which the owner fails to fill in an entry form.

It shall be the duty of the County Committee to examine these entry forms, and to satisfy themselves, as far as practicable, as to the eligibility of each entrant before the list of competitors is supplied to the judge.

9. The County Committee shall, subject to the approval of the Department, appoint a competent judge or judges for the purpose of this scheme. A resident in the county may be appointed as judge, but he shall not act in the districts, as defined in the county scheme, in which his residence is situated.

10. The inspection of flax crops entered for competition under this scheme will be made in the months of June, July or August.

11. The following points shall be taken into consideration by the judge in making his awards :—

- (a.) Freedom of crop from weeds ;
- (b.) Uniformity of crop ;
- (c.) Length and quality of crop.

12. In case of insufficient competition, want of merit, or in which the conditions of this scheme have not been strictly adhered to, the prizes may be withheld in whole or in part.

If it be discovered that any fraud, deception, or dishonest practice has been committed, either in connection with ownership of the flax, or in any representation which may have affected, or have been intended to affect, the decision of the judge or judges, the offending person shall be disqualified, and shall be debarred from obtaining any future benefits under the Department's schemes. He shall also forfeit any claim in respect of prizes awarded under this scheme. The Department reserve the right to publish the names of such persons if deemed expedient.

13. The judges report shall deal with such matters in connection with the competition as the County Committee and the Department may decide.

14. The Committee shall submit the judge's report with list of awards, within a week of their receipt, for consideration by the Department, who, as soon as they are satisfied as to the fulfilment of the conditions of this scheme, will notify the Secretary of the County Committee that the prizes or reduced prizes may be paid. *The awards will not be final until the sanction of the Department has been conveyed in writing to the Secretary.*

15. The County Committee shall furnish to the Department such detailed statements of expenditure under this scheme as may be required from time to time.

16. In all matters of dispute relating to this scheme the decision of the Department shall be final.

Note.—If an association of farmers decide to employ a flax expert the Department, on conditions to be prescribed by them, will be prepared to contribute to the cost of employing such an expert, provided a person approved by the Department is available.

Scheme No 9

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

INSTRUCTION IN AGRICULTURE, 1912-13.

1. The Department are proposed to approve the appointment of at least one Instructor in Agriculture for each county in Ireland, provided the County Committee can secure the services of a person or persons qualified for the position. In the case of new appointments no person shall be eligible for an Instructorship in the county of which he is a native, or in which he resides permanently.

The Department will, as far as possible, assist County Committees in obtaining instructors by supplying the names of qualified persons.

2. The initial salary of an Instructor shall be £150 per annum (inclusive of maintenance and hotel expenses), in addition to expenses of locomotion, which include second or third class railway fare as decided by the County Committee, car hire when necessary, or a bicycle allowance not exceeding 2s., or in the case of a motor cycle, 3s. per mile.

An increment of salary not exceeding £10 in any one year may be granted to an Instructor on re-appointment, provided that his work during the preceding year has been performed to the satisfaction of the Department, and that his salary shall not be increased thereby to more than £250 per annum.

3. The employment of an Instructor under this scheme shall not continue beyond the 30th September, 1913, and shall be terminable at any time previous to that date by the giving of three months' notice in writing on either side.

4. (1.) It will be the duty of an Instructor, who should take every

[75]

opportunity of discussing with farmers matters affecting their industry, to give his whole time to the work and to do all in his power to further the interests of agriculture in the county, and in pursuance thereof:—

(a) to conduct such field and live stock experiments and demonstrations as may be approved by the Department, including the selection of suitable land, the supervision of the sowing of the seeds and manures, and of the keeping of the plots free from weeds, the weighing of the produce, the tabulation of the figures, and the preparation of reports on the results;

(b) to deliver lectures on agricultural subjects, such as soils, manures, seeds, pastures, crops and their cultivation, the breeding, feeding, and management of live stock, especially of dairy cattle and the keeping of milk records;

(c) to visit farms;

(d) to reply to letters from farmers seeking information;

(e) to make known as widely as possible the facilities provided by the Department for the training of young men who intend to become farmers and, especially, to endeavour to secure the attendance of farmers sons at Winter Agricultural Classes;

(f) to advise farmers (i.) how they can take advantage of the Department's Seed Testing Station, (ii.) as to the registration of cows and the formation of Cow Testing Associations under the Department's Scheme for the Improvement of Dairy Cattle, (iii.) as to the planting of forest trees for shelter and ornament, (iv.) how they can best avail themselves of all approved county schemes, and (v.) how they may take advantage of agricultural co-operation;

(g) to act as official sampler under the Fertilisers and Feeding Stuffs Act, to make known the provisions of this Act, of the Destructive Insects and Fests Acts, and of the Woods and Agricultural Seeds (Ireland) Acts;

(h) to report, if required by the Department, on applications for the consent of the Department under Section 33 of the Irish Land Act, 1909, to the felling of trees on holdings affected by that Act; and

(i) to furnish to the County Committee and to the Department as may be required, reports on the progress of his work and on matters relating to the agricultural industry of the county.

(2.) An Instructor may also be required (a) to assist in the teaching of winter agricultural classes, (b) to assist in carrying out the provisions of the scheme for the registration of dairy cattle, by the weighing and testing of milk, etc., and (c) to act as judge in connection with the scheme of prizes for cottage and small farms in a county other than that in which he acts as Instructor.

Note.—The employment of an Instructor to teach winter agricultural classes will not relieve him of his other duties under this scheme, and accordingly when he is occupied in teaching for four days in a week he should deliver at least one lecture in the same week on a day when not engaged in teaching, as well as attend as far as practicable to the other branches of work above mentioned. If occupied less than four days a week in teaching such classes, the number of lectures and demonstrations should be correspondingly increased.

3. The Instructor or Instructors shall, as far as the monies allocated by the County Committee will permit, make arrangements to have experimental and demonstration plots in each district or circuit into which the county may be divided under Clause 6 of this Scheme, and, during the summer months, meetings of farmers should be held at these plots to discuss the objects, etc., of the plots in selecting sites for plots preference should be given to localities in which agricultural classes have been held during the preceding winter.

During the winter months—viz., from the beginning of October to the end of February—the County Committee should arrange for a series of

lectures by the Instructor or Instructors in the several circuits. At least one lecture in each circuit should deal with the results of the experiments carried out in the previous season.

6. For the purposes of this scheme County Committees will find it convenient to divide the county into a number of districts or circuits, in which an Instructor should, as far as possible, work in turn.

The County Committee alone are responsible for the selection of centres and the arrangement of lectures. No work of this nature should be undertaken by Instructors, but it is desirable that they should be consulted in the matter. The centres at which lectures are to be given during the season of 1912-13 should, if possible, be decided upon by the County Committee not later than 18th October, 1912.

When a County Committee have decided that a lecture should be given in any locality, they should appoint a small local committee, who should undertake to secure the necessary accommodation for the purpose, to arrange for the lighting, heating, etc., of the room in which the lecture is to be delivered, and to have posters and handbills, which will be supplied by the Secretary of the County Committee effectively displayed and distributed throughout the locality. Copies of these posters and handbills should be forwarded to the Department by the Secretary of the County Committee at least one week prior to the commencement of the lectures to which they refer.

The County Committee alone are responsible for seeing that an Instructor's time is fully and usefully employed, and that he pays due regard to the performance of the duties for which he is appointed. With this end in view, the County Committee should take such steps as may seem to them most effective to make known to farmers in the several districts of the county that an Instructor is available to afford advice on all matters affecting their interests.

The County Committee shall obtain the Department's approval in writing for all payments in respect of materials for experiments and demonstrations, and articles of equipment required by an Instructor, and shall keep a separate account of all expenditure under this scheme. Detailed statements of such expenditure as may from time to time be required shall be furnished to the Department by the County Committee.

7. It will be the duty of the Secretary of the County Committee to furnish such returns in connection with this scheme as the Department may require; and to keep an inventory, and be responsible for the custody, of all equipment provided for the purposes of this scheme.

8. No action shall be taken by the County Committee towards putting this scheme, or any part thereof, into operation until the sanction of the Department has been obtained in writing.

9. In all matters of dispute relating to this scheme the decision of the Department shall be final.

Scheme No. 10.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

WINTER AGRICULTURAL CLASSES.

1912-13.

1. The County Committee may employ as teacher for agricultural classes (1) for not more than four days per week, an Itinerant Instructor in Agriculture, if approved by the Department, or (2) an approved teacher, who would devote his whole time to the classes.

In the event of an Itinerant Instructor being employed as teacher he shall devote the remaining days of the week to duties in connection with the scheme of Itinerant instruction in agriculture.

[77]

2. (1.) The aim of the instruction is to impart such knowledge as is capable of direct practical application to farm work. The subjects taught will be as follows:—Soils, tillages, manures (natural and artificial), seeds, grasses, weeds, farm pests, treatment of pasture, cropping, management of livestock (including winter dairying), valuation of manures and feeding stuffs, simple farm account keeping and farm calculations, measurement, elementary chain surveying, and elementary science explanatory of the principles underlying ordinary farm practice. As far as possible the lessons should be illustrated by practical demonstrations.

(2.) The County Committee may arrange for a few outdoor demonstrations in the planting and after treatment of fruit trees and the cultivation of vegetables to be given to the students by the County Instructor or Instructors in Horticulture at gardens in the immediate neighbourhood of the class centres, but no lectures on horticulture shall be given. The holding of horticultural demonstrations must not entail any reduction of the number of hours assigned for the teaching of other subjects.

3. (1.) Centres for the classes should be selected at the earliest possible date by the County Committee, or by a sub-committee appointed by them under Clause 6 of this scheme. Preference should be given to thickly-populated tillage districts, and no place should be selected where it appears likely that a minimum regular attendance of ten students cannot be secured. It is desirable that the Itinerant Instructor or Instructors in Agriculture should be consulted as to the selection of centres, but they should not be required to undertake responsibility therefor, or for the arrangements for the organisation of the classes. Unless in exceptional circumstances, centres at which agricultural classes have been held in recent years should not be selected under this scheme.

(2.) Each class shall be held on not more than three or less than two days weekly during a period not exceeding twenty weeks, commencing not earlier than the 21st October, 1912, and ending not later than the 15th March, 1913.

(3.) In fixing the days of the week on which the classes are to be held at any centre, the County Committee should have regard to the dates of fairs and markets, as well as to any local circumstance which might interfere with the attendance of students on certain days.

(4.) The classes shall be held in the morning and afternoon, and the hours of attendance shall be arranged to suit, as far as possible, the convenience of students who travel by rail. Instruction in subjects mentioned in Clause 2 (1) of this scheme shall be given for at least four hours each day.

4. (1.) The County Committee shall, by means of advertisements in the local newspapers and by posters and leaflets, invite applications for admission to the classes. Copies of these posters and leaflets must be forwarded to the Department as soon as issued.

The County Committee may make such regulations as they think necessary with regard to—

(a.) the maximum age of students to be admitted to the classes: and

(b.) the admission to classes of students who have previously attended similar classes, provided that admission to an elementary class shall not be approved in the case of any student who has attended two previous classes.

(2.) Applications for admission to the classes must be made to the Secretary of the County Committee, on forms provided by him for the purpose.

(3.) Admission to the classes will be conditional on the applicants satisfying the Department that their general education is sufficient to enable them to benefit by the instruction given, and on their undertaking to attend regularly throughout the course.

(4.) The classes shall be confined to young men over sixteen years of age on 1st October, 1912, who are actually engaged in farm work in the county, and not more than twenty-four students shall be admitted at any centre.

If the number of students eligible for admission at a centre is less than ten, the class proposed for that centre shall not be held. Provided, however, that, subject to the approval of the Department, the County Committee may, if they think fit, (a) prescribe, for admission, a minimum age greater than sixteen years, or (b) if a sufficient number of students of sixteen years or over is not available, admit applicants who are not less than fifteen years of age on 1st October, 1912.

(5.) No applicant shall be permitted to join a class after the lapse of two weeks from the date of the first meeting of the class.

(6.) No fee shall be charged for the course. Students must provide, at their own expense, note-books and other stationery as directed by the teacher.

5. If the attendance at a class falls below five on three consecutive occasions, the class shall be at once discontinued.

6. Students who reside beyond a radius of three statute miles from the class centre will, at the end of the course, be allowed the cost of third-class railway tickets, or, if the journey cannot be made by rail, one penny for each mile by which the double journey by road between their homes and their class centres exceeds six miles, provided that their attendance and progress are regarded by the Department as satisfactory. No student will be regarded as having attended satisfactorily who shall not have been present at five-sixths of the meetings of his class, unless his absence shall have been due to illness or other unavoidable cause.

7. It is recommended that a County Committee adopting this scheme should appoint, from amongst their own members, a special sub-committee of not more than six members who should be empowered to make, in consultation with the Department's Agricultural Inspector, the necessary arrangements for the organisation and holding of the classes. Particulars of the arrangements made are to be at once submitted on Form A 194 for the Department's approval. In the event of any alteration in the time table of a class being subsequently found desirable, the Department's approval for same should be applied for without delay. No payments, under this scheme, shall be authorised except by the County Committee.

8. It shall be the duty of the teacher of Agriculture to keep a register of attendance of the students on the form provided, and in the manner prescribed by the Department.

9. The Secretary of the County Committee shall—

(1.) Submit on the prescribed form, for the approval of the Department, the details of the scheme as proposed for the county;

(2.) At the earliest possible date after the opening of the classes, furnish to the Department, on the prescribed form, a return of the students in attendance, showing for each student the mode of travelling to the class and the daily mileage;

(3.) Obtain the Department's approval, in writing, for all payments in connection with this scheme, and keep a separate account of all such payments;

(4.) Keep an inventory, and be responsible for the custody, of all equipment provided for the purposes of this scheme;

(5.) Immediately after the close of the course, take charge of the equipment provided for the classes, and furnish a list of the same to the Department;

(6.) Submit to the Department a return of the attendance of the students and of the travelling allowances payable to them under this scheme.

*10. In all matters of dispute relating to this scheme the decision of the Department shall be final.

NOTE.—(1.) If these classes are entered under the Department's revised scheme for the administration of grants to schools other than day secondary schools, the regulations of that scheme must be strictly observed.

(2.) Students of winter agricultural classes whose attendance and progress thereto have been satisfactory, receive special preference in connection

with the award of agricultural apprenticeships at the Department's Agricultural Stations. Such students are exempt from the ordinary entrance examination prescribed for other applicants for these apprenticeships. If however, scholarships tenable at an Agricultural Station, or other approved agricultural school, are offered by the County Committee to students of the Winter Agricultural Classes, such scholarships shall be awarded on the results of a competitive examination conducted by the Department.

WINTER AGRICULTURAL CLASSES.

SYLLABUS OF THE COURSE.

Soils.—Brief sketch of origin and formation. Conditions influencing fertility. Soil improvement by draining, liming, etc.

Plant Life.—Study of a plant, and the functions of roots, stem and leaves; modification of these organs. Elements of plant food and their relative importance from an agricultural point of view. Conditions affecting the development of plants. Examination of the habits of growth and duration of the principal crops and weeds found on the farm, and the practical application of this knowledge.

Manures.—Farmyard manure; its storage and application. Organic and artificial manures. Composition, description and identification of artificial manures; their valuation, time and manner of application. Mixing manures. Special manures. Fertilisers and Feeding Stuffs Act.

Crops and Cropping.—Rotations. Cultivation. Seeding, Manuring and Harvesting of the principal farm crops. Forage and catch crops. Study of the commoner insect pests and fungoid diseases of crops.

Grasses and Clovers.—Characteristics, duration and adaptability for various purposes in farm practice. Identification of the different species and varieties.

Seeds.—Identification of farm seeds and the commoner impurities and adulterants. Germination and purity tests, how performed; the inferences to be drawn therefrom. Change of seed. Grass seed mixtures. Weeds and Agricultural Seeds Act.

Livestock.—Care and management of various classes of farm stock, with special reference to breeding, feeding and housing. Principal breeds of live stock, their characteristics and suitability for various systems of farming.

Feeding Stuffs.—Constituents of foods; their respective functions and value in animal nutrition. Valuation, description, properties and uses of home-grown and purchased feeding stuffs. Impurities and adulterants. Rations for various classes of farm stock. Methods of using foods. Fertilisers and Feeding Stuffs Act.

Dairying.—Secretion of milk; composition; conditions influencing the quality and quantity of the milk yield. Care and treatment of milk for new milk trade or buttermaking. Cream ripening. Milk records. Improvement of the milking qualities of herds. Respective merits and demerits of the several systems of dairying. Summer and Winter Dairying.

Measurement and Land Surveying.—Rules for estimating the areas of the principal geometrical figures met with in chain surveying and farm calculations. Field book; method of entering measurements; calculation and computation of areas. Practical work with the chain in the field. Plotting from the field book to given scales. Location of drains, etc., on the plans for future reference.

Farm Account Keeping.—Method of keeping a diary, cash book, and a record of credit transactions. Farm valuations and stocktaking. Balance sheets, their interpretation. Estimates of the cost of various farm operations, etc.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

INSTRUCTION IN POULTRY KEEPING.

1912-13.

1. The Department are prepared to approve the appointment of at least one instructor in Poultry-Keeping for each county in Ireland, provided the County Committee can secure the services of a person or persons qualified for the position. In the case of new appointments no person shall be eligible for the position of Instructor in the county of which he or she is a native or in which he or she resides permanently.

The Department will, as far as possible, assist County Committees in obtaining instructors by supplying the names of qualified persons.

2. Unless in exceptional circumstances the remuneration of the instructor shall not exceed £2 per week, in addition to expenses of locomotion, which include second or third class railway fare, as decided by the County Committee, car hire when necessary, or a bicycle allowance not exceeding 2d. (or in the case of a motor cycle) 3d. per mile.

3. The employment of the instructor under this scheme shall not continue beyond the 30th September, 1913, and is terminable at any time previous to that date by the giving of four weeks' notice in writing on either side.

The appointment of a instructor will terminate as a matter of course on her marriage.

4. It will be the duty of the instructor to give his or her whole time towards promoting improvement in poultry-keeping in the county, and in pursuance thereof to deliver courses of lectures on poultry-keeping; to conduct classes and give practical instruction and demonstrations on the feeding, housing, and general management of poultry; on the preparation of poultry for market, and on the treatment of common diseases such as gapes, etc.; to visit farms and poultry runs, and give such practical advice as may be desired by poultry-keepers; to inquire into and report upon outbreaks of disease; to inspect the egg distribution and turkey stations referred to in Clauses 10, 13, and 14; to assist selected applicants to procure suitable stock birds; and to report to the Department and to the County Committee regarding the progress of his or her work either weekly or otherwise as may be required.

5. For courses of lectures the county should be divided into circuits, each comprising not less than five centres. The instructor, except in special cases, should work for at least four weeks in each circuit, and deliver one lecture per week at each centre during that time. The instructor should visit, either on the day of the lecture or on the following day, farms and poultry runs in the neighbourhood, and give such information on poultry-keeping as the circumstances of the case may suggest.

In no case should lectures be given after the 31st May.

6. Instead of delivering lectures the instructor may conduct practical classes, in accordance with the provisions of Scheme 12.

7. It will be the duty of the County Committee to select centres at which the lectures and classes will be held, and to appoint at each centre, a local committee, with an honorary secretary, who should select the room in which the lectures will be delivered, and arrange for the hiring, lighting, and warming. In selecting centres the County Committee should have particular regard to districts in which lectures or classes may not have been held in previous years.

The County Committee alone are responsible for the selection of centres and the arrangement of lectures and classes. It is desirable, however, that the instructor should be consulted in the matter.

It will also be the duty of the County Committee to undertake the re-

[81]

responsibility of seeing that the Instructor's time is fully and usefully employed.

The County Committee shall keep a separate account of all expenditure under this scheme, and shall furnish such detailed statements of that expenditure as may from time to time be required by the Department.

The Secretary of the County Committee shall keep an inventory, and be responsible for the custody of all equipment provided.

8. Lectures and classes should be arranged, wherever possible, to be given in schoolrooms or other suitable rooms, and should be held in rural centres only. Towns and the larger villages should be avoided, as experience has shown that the greatest success attends those meetings which are held in the rural parts of a county, especially in districts where the greatest number of those interested in poultry-keeping is to be found. The local committee at each centre should be responsible for appointing a representative chairman for each lecture, and should undertake to have posters and handbills, which will be supplied by the Secretary of the County Committee, effectively displayed and distributed throughout the circuit. Copies of these posters and handbills should be forwarded to the Department at least a week prior to the commencement of each course of instruction. Each lecture should be followed by a discussion, during which persons interested in poultry-keeping will be invited to ask questions relative to the subject. Where a course of lectures has already been given a new syllabus should be presented.

9. The Instructor will be required, after the stations have been reported by her to be fully stocked, to make, before the 31st May, at least two inspections of all hen and duck stations, and two inspections of all goose and turkey stations in the county. In the case of turkey stations these inspections must be made between 1st February and 15th April. The Instructor shall submit at the end of each week to the County Committee and to the Department on the prescribed form a report on all stations inspected during that week.

DISTRIBUTION OF SITTINGS OF EGGS OF PURE BREEDS.

Hen and Duck Stations.

10. In counties in which instruction in poultry-keeping is provided, a limited number of premiums of 55 each may be offered to persons selected by the County Committee and approved by the Department. The Committee in making such selection shall have regard to the needs of the various districts in the county, provided that when considering the application of a person who had not held a station in 1912 care is taken that the new station shall not be established within three statute miles of an existing approved station in the county.

Applicants will be required to undertake to comply with the following conditions:—

- (1.) To keep only one pure breed of hens, or one pure breed of hens and one pure breed of ducks, for station purposes.
- (2.) To sell or destroy any existing fowl on the premises of which the Instructor or the Department may disapprove, and not to bring on the premises, during the period for the distribution of eggs, fowl of any description without the sanction of the Instructor and of the Department.
- (3.) To dispose of the male birds in use at the station during 1911-12, and to replace these with others unrelated to the stock at the station.
- (4.) When a premium is claimed for hens alone, to keep not less than thirty or more than sixty birds, approved by the Instructor and the Department, of the selected breed. If the premium is claimed in respect of hens and ducks, not less than five ducks and twenty-five hens must be kept, or ten ducks and twenty hens, but the total number of birds to be kept at any one station shall not exceed sixty. At least one cock or cockerel must be kept for every ten hens or pullets, and one drake for every five or six ducks.

(5.) To replace each year at least one-third of the hens with early-hatched pullets, and one-third of the ducks with ducklings.

(6.) To provide proper housing and day shelter where such do not already exist. In the case of enclosed runs for hens the size should be at least twenty square yards per bird.

(7.) To feed and care the birds in such a manner as the Instructor and the Department may require, and not to dispose of the birds until after the 31st May.

(8.) To supply, during the season specified in par. (10.) below, to residents in the rural districts of the county at least 80 sittings of eggs from the station birds (twelve eggs to count as a sitting), at a price not exceeding 1s. per sitting (the cost of package and, where necessary, carriage being borne by the purchaser), and to replace infertile eggs that are returned within one month from the date on which they were sent out. In special cases the Department may sanction a higher price than 1s. per sitting, provided the County Committee show satisfactory reasons for increasing the price.

If there is a sufficient demand for sittings from residents in the county each applicant should be restricted to one sitting, but if less than 80 sittings are distributed the premium will be reduced in proportion.

Holders of stations may set eggs for their own use, but such sittings will not count towards premium.

No maximum number of sittings to be distributed is prescribed, but holders of stations must continue selling sittings at the fixed price until May.

(9.) To stamp all eggs given out with a stamp provided for the purpose by the County Committee.

(10.) To enter daily during the season in a special book provided by the County Committee a record of all eggs sold and distributed. This book must be sent to the Secretary of the County Committee or to the Department when asked for, and in any case must be returned together with the egg stamp to the Secretary of the County Committee at the end of the distributing season, which will commence on the 1st December, 1912, and terminate on the 31st May, 1913. (See Clause 18.)

(11.) To permit the Instructor and the Department to inspect the birds at any time.

[NOTE.—In exceptional circumstances the Department may allow other pure breeds to be kept on the same premises provided all such birds are up to station standard, and all station requirements are complied with as to housing, penning, feeding, and mating. A limited number of cross-bred hens may also be allowed, provided no male birds are allowed to run with such cross-bred hens. Permission, however, will be given only where the Instructor and the Department are satisfied as to the efficiency of the arrangements made by the station holder to keep all such stock thoroughly isolated from the station birds. In no case will a first cross or other cross-bred breeding flock be allowed.]

Any infringement of the above rules may entail the cancellation of the premium.

11. The following breeds of hens and ducks will alone be recognised:—

HENS.

Laying Breeds.

Black Minorcas. White Leghorns. Brown Leghorns.

General Purpose Breeds.

Plymouth Rocks (Barred variety recommended). Orpingtons (Buff and White recommended). White Wyandottes. Salmon Faverolles.
Saxons. Rhode Island Reds.

DUCKS.

Indian Runner. Aylesbury. Pekin. Rouen.

12. A grant of 50 per cent. of the actual cost, but in no case exceeding £2, may be made to selected persons who provide themselves for the purpose of this scheme with portable wooden fowl-houses, and a similar grant not exceeding £1 may be made for suitable day shelters, approved by the Department. No grant in respect of a poultry house will be made to any station holder who has received a grant for this purpose in a previous year, nor will any grant be made in respect of improvements in an existing house, and if a new house is provided it must be portable.

GOOSE STATIONS.

13. A limited number of premiums of £2 each may be offered to persons selected by the County Committee, and approved by the Department, who will undertake to comply with the following conditions:—

(1.) To keep on the premises only one pen of birds, viz.—a gander and three geese of the Embden breed, which have been approved by the Instructor and the Department.

(2.) To retain no gander for more than six years at any one station. A gander which has been for six years at one station must be replaced by a bird unrelated to the stock at the station.

(3.) To supply, during the season specified in paragraph (7) below, to residents in the rural districts of the county at least 12 sittings of eggs from the station birds (three eggs to count as a sitting), at a price not exceeding 1s. 6d. per sitting (the cost of postage and, where necessary, earnings being borne by the purchaser).

If there is a sufficient demand for sittings from residents in the county each applicant should be restricted to one sitting, but if less than 12 sittings are distributed the premium will be reduced in proportion.

No maximum number of sittings to be distributed is prescribed, but holders of stations must continue selling sittings at the fixed price until 31st May.

(4.) To provide and maintain an adequate supply of water for the birds.

(5.) To provide proper housing where necessary. The birds should have access to suitable shelter at all times, and should be handled, when a sufficient amount of natural food is not obtainable, in such a way as the Instructor and the Department may require.

(6.) To stamp all eggs given out with a stamp provided for the purpose by the County Committee.

(7.) To enter daily during the season in a special book provided by the County Committee a record of all eggs laid and distributed. This book must be sent to the Secretary of the County Committee or to the Department when asked for, and in any case must be returned together with the egg stamp to the Secretary of the County Committee at the end of the distributing season, which will commence on 1st January and terminate on 31st May, 1918.

(8.) To permit the Instructor and the Department to inspect the birds at any time.

(NOTE.—Only those applicants on whose premises there is an adequate supply of water will be approved as keepers of goose stations. In special cases the Department may sanction the keeping of a second pen of geese provided the birds are of the Embden breed and are up to premium standard, are effectively isolated from the station birds, and that all station requirements with regard to mating, housing, feeding, and management are complied with. Only one premium, however, will be allowed.)

Any infringement of the above rules may entail the cancellation of the premium.

TURKEY STATIONS.

14. A limited number of premiums of £2 each may also be offered to

persons selected by the County Committee and approved by the Department who will undertake to comply with the following conditions:—

(1.) To keep one pure bred American Bronze stock turkey cock, approved by the Instructor and the Department, for the service of turkey hens, the property of residents in the rural districts of the county. The approved turkey cock shall serve, at a fee of 6d. per service, twenty hens other than those belonging to the owner of the turkey cock. If a smaller number is served, the premium will be proportionately reduced. After twenty hens have been served the owner may refuse to allow the bird to serve more or may charge a higher fee. The stock birds must not be less than the following weights on 1st January, 1913, viz.:—Cockbirds, 22 lbs.; adult birds 28 lbs. Birds more than three years old are not eligible for premiums.

[A station-holder under the 1911-12 scheme will not be eligible to hold a premium with the same bird under this scheme.]

(2.) To provide such housing accommodation and to feed and care the bird in such a manner as the Instructor and the Department may require.

(3.) To enter daily during the season in a special book, provided by the County Committee, a record of all hens served. This book must be sent to the Secretary of the County Committee or to the Department when required, and in any case must be returned to the Secretary of the County Committee at the end of the service season, which will terminate on 31st May, 1913.

(4.) To permit the Instructor and the Department to inspect the birds at any time.

[NOTE.—In exceptional cases the Department may approve of a second turkey cock of the American Bronze breed being kept, provided it is up to premium standard, and that all other station requirements are complied with. Only one premium however will be allowed.]

Any infringement of the above rules may entail the cancellation of the premium.

15. A grant of 50% of the actual cost, but in no case exceeding £1. may be made to selected persons who provide themselves for the purposes of this scheme with a house and enclosed run of a pattern approved by the Instructor and by the Department.

GENERAL.

16. An applicant will be eligible for one premium only in respect of each of the following:—(a) hens or buns and ducks, (b) geese, and (c) turkeys, but the same person may hold premiums for (a), (b) and (c). No premium, however, will be given for ducks alone.

17. (1.) As soon as the Instructor has been appointed and the number of premiums proposed to be awarded has been approved by the Department, the County Committee shall invite applications from persons in the county who already possess, or are willing to purchase, pens of the approved pure breed of hens, buns and ducks, or geese, as the case may be, or to keep one pure-bred turkey cock, and who are prepared to comply with the above conditions. When these applications have been received the Instructor shall, without delay, inspect and report to the County Committee as to the number of suitable applicants. The names of the applicants selected by the County Committee, with full particulars as to the breeds, number of birds, and housing shall then be submitted, on the prescribed form, for the approval of the Department, who may thereupon further inspect the selected farms, and submit a list of those of which they approve to the County Committee for their final selection.

(2.) The County Committee may make such regulations as they think fit with regard to requiring applicants for premiums to deposit with each application a sum not exceeding 10s.—such deposit will be refunded if the

applicant is not selected by the Committee, or being selected complies with all the conditions of the county scheme, or to be forfeited to the County Committee in the event of the applicant when selected failing to comply with all the conditions of the county scheme.

18. The Department will not consider applications from a county in respect of premiums under this scheme later than 1st November, 1912.

County Committees who intend to adopt this scheme should have all arrangements completed prior to the 1st December, 1912.

19. (1.) Not later than 7th June, 1913, the selected applicants for premiums must forward to the Secretary of the County Committee the record books and egg stamps referred to in Clauses 10 (10), 13 (7), and 14 (3), accompanied by a certificate that the entries in these books are correct, and that all the conditions of this scheme have been complied with.

(2.) As soon as the Department are satisfied as to the fulfilment of the conditions of this scheme, the Secretary of the County Committee will be notified that payment may be made by the Committee of the premiums or portions thereof payable under this scheme.

(3.) Any premium not applied for by the 7th June, 1913, will be considered as having lapsed.

20. No action shall be taken by the County Committee towards putting this scheme, or any part thereof, into operation, until the sanction of the Department has been obtained in writing.

21. In all matters of dispute relating to this scheme the decision of the Department shall be final.

Scheme No. 12.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

TUTORIAL AND PRACTICAL CLASSES IN POULTRY-KEEPING.

1912-13.

1. The Department are prepared to approve the holding of Tutorial and Practical Classes in Poultry-Keeping by the Itinerant Instructors in Poultry-Keeping in counties where circumstances justify the introduction of this form of instruction.

2. Classes shall be held at each selected centre for not less than two and not more than four weeks, and daily instruction of not less than two hours' duration shall be given.

At least eight pupils must be enrolled at each centre, but not more than eighteen pupils may be admitted to any class.

Pupils must undertake to attend regularly. A person under fourteen years of age shall not be enrolled on the class register.

3. It will be the duty of the Instructor—

(a.) To give instruction in the subjects suggested in the syllabus, but the Instructor should consider the requirements of the district as well as the season of the year and select subjects accordingly. Each day's work should commence with a discourse and demonstration, which should be followed by practical instruction. Diagrams, models, samples of foods, and black-board illustrations should be used as far as possible.

The pupils should be required to take as full notes as possible; these should be carefully checked and corrected by the Instructor in her spare time.

At the end of each week the Instructor should question the class on the week's work, and should hold a short examination at the end of the course.

(b.) To visit farms and poultry runs every day in her spare time, especially at the homes of pupils, and advise according to individual requirements. The general conditions of management should be gone

into, mistakes pointed out, and improvements suggested. The fowl-houses should be examined, and, where necessary, attention drawn to such points as day shelter, roosting accommodation, ventilation, lighting, lime-washing, etc. The preparation and mixing of the food might also be carried out under the direction of the Instructor.

(c.) To arrange for the distribution of the Department's leaflets applicable to the subjects dealt with at the classes.

(d.) To keep a register of attendance of the pupils according to Department's regulations.

(e.) To furnish weekly to the Department and to the County Committee a report on the prescribed form.

4. It will be the duty of the County Committee to select suitable centres at which classes will be held, and to appoint at each centre a local committee, with an honorary secretary, who will be responsible for the local arrangements necessary and for a good and regular attendance of pupils.

The local committee should undertake to have posters and handbills, which will be supplied by the Secretary of the County Committee, effectively displayed and distributed in the neighbourhood of the centre.

The centres should be selected in rural districts; large towns and villages should be avoided.

It will be the duty of the Secretary of the County Committee to keep an inventory, and be responsible for the custody of all equipment provided.

SYLLABUS.

(a.) SUGGESTED SUBJECTS FOR DISCUSSION AND DEMONSTRATION.

I. *Breeds and Crosses of hens best suited to district.*—(1.) for egg production; (2.) for table; (3.) for general purposes. Describe points of (1) a good layer, (2) a good table fowl, (3) a general purpose fowl, and illustrate the difference.

II. *Ducks, Geese, and Turkeys.*—Rearing and general management.

III. *Breeding and selection of stock.*—Enumerate advantages of pure breeds over mongrel fowls, and point out the value of selection for desired points, e.g., laying strains, etc. Use of trap nests. (Illustrate by diagrams and black-board.) Conditions necessary to obtain fertile eggs.

IV. *Houses and Runs.*—Suitable houses and day shelters, illustrated by models, diagrams or black-board sketches. Principles of housing, such as situation, shelter, materials to use, size of house, ventilation, light, flooring, fittings (nest boxes and perches); care of houses; importance of cleanliness; danger from parasites; the use of portable houses and the colony system; other systems.

V. *Chicken Rearing.*—Conditions necessary for success. Methods of hatching and rearing, natural and artificial; when to hatch for (1) stock birds; (2) egg production; (3) table birds. Describe simple hatching box and how it might be made. Provide a hatching box and hen; demonstrate on making the nest and setting the hen. Mention precautions necessary against rats and insect vermin. Explain the importance of fresh ground for chickens.

Describe best kind of coop and how to use it. (Illustrate by model or black-board.) (See Leaflet No. 43.)

VI. *Feeding.* Importance of suitable food. Best foods; how to use them for (1) rearing young stock; (2) egg production; (3) table poultry; and (4) breeding stock. Give approximate quantities and prices of foods; show samples of feeding stuffs, grits, etc. Special attention should be paid to suitable foods of a simple character within the reach of poultry-keepers in the district.

VII. *Winter Egg Production.*—Explain chief points of (1) early hatching; (2) early moulting; (3) day shelters; and (4) suitable feeding with special reference to the use of animal and green foods.

VIII. *Selecting and Testing Hatching Eggs.*—Kind of eggs to select demonstrate with suitable and unsuitable eggs. Describe a fertile, infertile

and added egg (black-board illustrations and specimens). Explain the use of testing, demonstrating with a hand tester.

IX. *Marketing and Packing of Eggs*.—Necessary conditions, with special reference to maintenance of egg supply in winter; size, cleanliness and freshness, marketing and packing.

X. *Preservation of Eggs for Home Use*.—Best preservatives and how to use them. Demonstrate with butter, vaselina, or water-glass.

XI. *Preparation and Marketing of Table Poultry*.—Trough feeding; use of pellets; proper fasting and methods of, killing, plucking, stabbing, singeing, shaping, cooling, trussing, grading, and packing.

XII. *Simple Accounts and Egg Records*.—Explain advantages and teach suitable methods, see page [88].

XIII. *Diseases*.—Explain symptoms, cause and treatment of common diseases, making special mention of the importance of fresh ground, isolation, disinfection and other methods of prevention.

XIV. *Composition of an Egg*.—Description of its composition; the use and association of the various parts in the formation of the chicken.

Suggested Additional Demonstrations

(1) Dissection of two birds, showing and explaining the difference in appearance between the organs of a healthy and diseased specimen. (2.) Dissection of a chicken with gapes; explaining symptoms, cause, preventive and curative treatment, and demonstrating the effect of fumigation. (3.) Dissection of an over-fat hen, showing and explaining effect of accumulated fat on the egg producing and other organs. (4.) Careful removal of the digestive organs of a fowl, explaining in detail their uses. (5.) Packing eggs for hatching and private trade. (6.) Preparing soft foods. (7.) Simple operations; the use of simple medicines. (8.) Making of simple appliances such as feeding troughs, drinking vessels, nest boxes, chicken coops, hatching boxes, etc. (9.) Use of incubator and brooder.

(9.) PRACTICAL WORK IN WHICH PUPILS SHOULD TAKE PART.

- (1.) Packing eggs for hatching and private trade.
- (2.) Making simple appliances.
- (3.) Making a hatching nest and setting the hen.
- (4.) Testing eggs.
- (5.) Treatment of chickens affected with gapes.
- (6.) Fattening; by trough feeding and the use of pellets.
- (7.) Killing, plucking, stabbing, singeing, shaping, trussing, and packing of table poultry.
- (8.) Use of incubator and brooder.

EXAMPLE OF A SUITABLE TIME TABLE FOR A TWO WEEKS' COURSE.

FIRST WEEK.

MONDAY.—(Opening Day.)

Previous to hour of class the Instructor should visit the appointed place to unpack outfit and make final arrangements.

Discourse and Demonstration.

Feeding (†No. VI.).—Show samples of feeding stuffs and demonstrate on the preparation of soft foods.

TUESDAY.—*Discourse.*

Houses and runs (†No. IV.).

Demonstration and Practical Work.

Killing, plucking and shaping of chickens.

WEDNESDAY.—*Discourse.*

Breeds best suited to district (†No. I.).

Demonstration and Practical Work.

Trussing and packing of chickens.

† These numbers refer to syllabus.

THURSDAY.—Discourse.

Breeding and Selection of Stock (†No. III.).

Demonstration and Practical Work.

Packing eggs for hatching and private trade.

FRIDAY.—Discourse.

Chicken rearing (†No. V.).

Demonstration and Practical Work.

(a) Making hatching nest and setting hen, or (b) use of incubator and brooder.

SATURDAY.—Visiting poultry yards of pupils and others in the district and giving practical advice according to requirements.**SECOND WEEK.****MONDAY.—Discourse.**

Winter egg production (†No. VII.).

Demonstration.

Dissection of an over-fat hen, showing and explaining effect of accumulated fat on the egg producing and other organs.

Practical Work.

Killing, plucking and shaping of chickens.

Class Work.

Questions to class on previous week's work, explaining correction of Notes.

TUESDAY.—Discourse and Demonstrations.

(a) Selecting and testing hatching eggs (†No. VIII.), showing and explaining use of hand tester.

(b) Sample accounts of egg records (†No. XII.).

Practical Work.

Trussing and packing of chickens.

WEDNESDAY.—Discourse.

Diseases (†No. XIII.).

Demonstration.

Dissection of two birds, showing the difference in appearance between the organs of a healthy and of a diseased specimen, and explaining the effect of the disease.

Practical Work.

Packing eggs for hatching and private trade.

THURSDAY.—Discourse.

Ducks, geese and turkeys (†No. II.).

Demonstration and Practical Work.

Killing, plucking and trussing a duck, goose or turkey.

FRIDAY.—Discourse.

(a) Marketing of eggs (†No. IX.).

(b) Preparation and marketing of table poultry (†No. XI.).

Class Work.

Résumé of work of course: examination.

SATURDAY.—Packing outfit and moving to new centre.**BOOKS.**

Specimen account books are supplied to the Instructor, and each pupil should be recommended to procure one from Messrs. Dollard & Co., Printing house, Dublin. Price 6s., postage extra.

Specimen books of Egg Record forms for the keeping of monthly returns are supplied to the Instructor, and additional copies will be forwarded to pupils who are willing to undertake the keeping of records.

† These numbers refer to syllabus.

TUTORIAL AND PRACTICAL CLASSES.

List of Articles recommended for Outfit, with approximate cost.

	s. d.	£ s. d.
2 Folding Tables,	② 9 9	0 19 6
3 Trussing Boards,	③ 0 10	0 6 8
3 Trussing Needles (8" or 10"),	③ 0 2	0 1 4
8 Trussing Knives,	⑧ 1 0	0 8 0
1 Bone for Sharpening,		0 0 6
8 Stubbing Knives,	⑧ 0 7	0 4 8
2 Choppers,	② 0 8	0 1 4
16 Swab Cloths,	② 0 3	0 4 0
1 Fattening Pan (Indoor),		0 5 3
1 Blackboard (36" x 30"),		0 6 0
Strong, Painted, (36" x 24" size, 4s. 6d.).		
12 Farm Produce Boxes (No. 1),	⑫ 0 1	0 1 0
4 Farm Produce Boxes (No. 3),	④ 0 3	0 1 0
1 Folding coop for treatment of sick birds,		0 2 6
2 Zinc Buckets,	② 1 9	0 8 6
1 Large Scrubbing Brush,		0 1 0
1 Small Scrubbing Brush,		0 0 6
6 Tin Forringers (2-plat size),	⑥ 0 2½	0 1 3
6 Picking Baskets,	⑥ 2 0	0 12 0
8 Enamel Plates,	⑧ 0 6	0 3 4
1 Spring Hook Weighing Machine (40 lbs.), (36 lb. size, 7s.).		0 4 9
1 Bellows for fumigating chickens affected with gapes,		0 2 6
1 " Deltatell .. Egg Tester (Speatt's Patent, Ltd.)		0 3 9
1 Toe Punch for marking chickens,		0 2 6
1 Set of Poultry Rings,		0 1 6
1 Sitting Nest (Indoor),		0 1 9
1 Incubator,		3 6 6
1 Foster Mother,		2 10 0
1 Dissecting case, containing 2 metal-handle scalpels, 1 scissors, 1 forceps,		0 7 9
STOCKS, viz. :—		
Samples of foods and grits, insect powders, fumigating powder ;		
small supply of drugs, viz. :—Carbolic Acid, Friar's Balsam, Pot-		
manganate of Potash, Powdered Sulphur, Epsom Salts, Chloro-		
dyne, Glycerine,		
		1 5 6
Total		£12 7 4

Arrangements have been made for the supply of the following illustrations, which will be issued direct on application to the Department :—

- 1 Set of Poultry Illustrations.
- 1 Set of Anatomy Illustrations.

Scheme No. 13.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

INSTRUCTION IN BUTTER-MAKING.

1912-13.

1. The Department are prepared to approve the appointment of at least one Instructor in Butter-making in each county in Ireland, provided the County Committee can secure the services of a person or persons qualified

for the position. In the case of new appointments no person shall be eligible for the position of Instructor in the county of which she is a native or in which she permanently resides.

The Department will, as far as possible, assist County Committees in obtaining Instructors by supplying the names of qualified persons.

2. Unless in exceptional circumstances the remuneration of the Instructor shall not exceed £2 per week, in addition to expenses of locomotion, which include second or third class railway fare as decided by the County Committee, car-hire when necessary, or a bicycle allowance not exceeding 2d. (or in the case of a motor-cycle 2d.) per mile.

3. The employment of the Instructor under this scheme shall not continue beyond the 30th September, 1913, and is terminable at any time previous to that date by the giving of four weeks' notice in writing on either side.

The appointment of an Instructor will terminate as a matter of course on her marriage.

4. The instruction shall take the form of lessons in dairying, and practical work daily in which the pupils shall take part (see syllabus). Each course shall extend for a period of not less than two, and not more than four weeks. Not more than twelve pupils may be admitted to any class. Pupils must undertake to attend regularly. A person under fourteen years of age shall not be enrolled on the class register.

5. On the first day of visiting each centre the Instructor should give a public lecture and demonstration, and during the remainder of the course at that centre should conduct a class daily in which people only will take part, but which shall be open to the public.

The Instructor shall keep a register of attendance of the pupils, recording therein daily such particulars as may be required by the Department.

It will also be the duty of the Instructor to give her whole time to the work of the Committee; to visit home dairies in the county and to give necessary advice particularly with regard to the proper ripening of milk and cream; to give, where possible during that part of the day not required for class work, demonstrations in the making of butter, by means of the equipment actually in use in the dairies visited; to reply to letters from persons seeking information on dairying; and to report to the Department and to the County Committee on the progress of her work either weekly or otherwise as may be required.

6. It will be the duty of the County Committee to select suitable centres at which classes will be held, and to appoint at each centre a local committee, with an honorary secretary, who will be responsible for the local arrangements necessary for the proper carrying out of the work, and who will be required to comply with the annexed conditions. The local committee should undertake to have posters and hand-bills, which will be supplied by the Secretary of the County Committee, effectively displayed and distributed in the neighbourhood of the centre. Copies of these posters and hand-bills should be forwarded to the Department at least a week prior to the commencement of each class.

It will also be the duty of the County Committee to undertake the responsibility of seeing that the Instructor's time is fully and usefully employed.

To avoid expense and to ensure success these classes should be held, as far as possible, in schoolrooms or other suitable buildings in rural centres. Unless in exceptional circumstances no class should be held in a large village or town, or near a creamery.

The County Committee are alone responsible for the selection of centres and arrangement of lectures. It is desirable, however, that the Instructor should be consulted in the matter.

The County Committee shall keep a separate account of all expenditure under the scheme, and shall furnish such detailed statements of that expenditure as may from time to time be required by the Department.

[91]

The Secretary of the County Committee shall keep an inventory, and be responsible for the custody, of all equipment provided for the purposes of this scheme.

7. No action shall be taken by the County Committee towards putting this scheme into operation until the sanction of the Department has been obtained in writing.

CONDITIONS REQUIRED OF LOCAL COMMITTEES.

I. To secure premises suitable for a working dairy, if possible not less than 25 feet by 18 feet, or other dimensions affording similar floor space. Either a public room, schoolroom, or barn with good floor, would be suitable for the purpose.

II. To secure a sufficient supply of good water.

III. To provide on the premises means of heating at least fifteen gallon of water at one time, for use in cleaning utensils, etc.

After the opening day at each centre about three gallons of milk and six gallons of cream will be required for each day's work. *Notes.*—The pupils should bring sufficient milk or cream for the use of the class.

IV. To guarantee not less than six and not more than twelve pupils to attend on each of the days over which the course of instruction extends.

V. To arrange for the carriage of utensils from one centre to another. The weight of the utensils is usually from 25 to 30 cwt., and they are somewhat bulky.

* SYLLABUS OF COURSE OF INSTRUCTION, EXTENDING OVER A PERIOD OF NOT LESS THAN TEN AND NOT MORE THAN TWENTY DAYS.

On the first day on which the Class meets, the Instructor should give a lecture and demonstration on Butter-making, and during the remainder of the Course conduct a class daily in which all pupils enrolled on the register should take part.

In addition to the daily practical work done by the pupils, the Instructor should give a series of daily lessons on Dairying, in which the following subjects should be dealt with:—

Housing.—Necessity for having clean, well lighted and well ventilated cowhouses.

Milking.—Necessity for clean, quick and complete milking.

Treatment of Milk from the time it leaves the cow until cream (or milk) is ready for churning.

Construction of Dairy.—Conditions necessary for obtaining best results.

Cream Separation.—Shallow pans and mechanical separator.

Cream Ripening.—Natural and artificial.

Whole Milk Ripening.

Churning.—Cream and whole milk.

Thermometer.—Use in ripening and churning.

Butter.—Washing, salting, making up, packing, marketing.

Utensils.—Articles required; cleansing and proper care of same.

Use of Creamometer and Gerber Tester.

Milk Records.—Explanation of method of keeping records, and advantages thereof.

Calf Rearing.—Housing, feeding, and general management of calves.

The pupils should take notes, which should be corrected by the Inspector in her spare time.

EQUIPMENT.

The Department recommend the following utensils for a travelling dairy school attended by twelve pupils:—

	Approximate Cost.		
	£	s.	d.
6 End-over-End Churns at £3,	18	0	0
6 Butter Workers, at 31s. 6d.,	11	5	0
6 Butter Boards, at 2s.	0	12	0
4 Large Butter Boards, at 3s. 6d.,	0	14	0
6 Scoops, at 1s.,	0	6	0
6 Sieves, at 2s. 6d.,	0	15	0
6 Pair Scotch Hands, at 2s. 6d.,	0	15	0
6 Squeezers, at 1s.,	0	6	0
6 Scrubbing Brushes, at 1s.,	0	6	0
6 Thermometers, at 1s. 6d.,	0	9	0
6 White Enamelled Buckets, at 5s. 6d.,	1	13	0
6 Iron Buckets, at 4s. 6d.,	1	7	0
4 Shallow Tins (Cream), at 4s.,	0	16	0
1 Pair Scales,	0	19	0
1 Set Iron Weights (7, 4, 2, 1, $\frac{1}{2}$, & $\frac{1}{4}$ lb.,	0	4	6
1 Set Brass Weights (2, 1, $\frac{1}{2}$, & $\frac{1}{4}$ oz.,	0	5	6
1 Set Creamometers,	0	6	6
1 Lactometer,	0	1	6
1 Gorbett's Butter-fat Tester (2 Bottles), about	2	10	0
1 2-Quart Measure,	0	2	6
4 Quart Measures, at 1s. 9d.,	0	7	0
4 Pint Measures, at 1s. 3d.,	0	5	0
2 Skimmers, at 8d.,	0	1	4
1 Hand Separator (17 gallons per hour),	7	10	0
1 Portable Boiler (15 gallons),	2	14	0
<hr/>			
£32 10 10			

The above equipment allows one churn, one butter worker, and one set of the smaller utensils for two students. A dash churn may be included in the equipment when the County Committee deem it desirable.

Scheme No. 14.

Special attention is directed to Clause 9.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

INSTRUCTION IN HORTICULTURE AND THE MANAGEMENT
OF BEES.

1912-13.

1. The Department are prepared to approve the appointment of at least one Instructor in Horticulture and Bee-keeping for each County in Ireland, provided the County Committee can secure the services of a person or persons qualified for the position. In the case of new appointments no person shall be eligible for the position of Instructor in the county of which he is a native, or in which he permanently resides.

The Department will, as far as possible, assist County Committees in obtaining Instructors by supplying the names of qualified persons.

2. Unless in exceptional circumstances, the remuneration of the Instructor shall not exceed £5 per week, in addition to expenses of locomotion, which include second or third class railway fare, as decided by the County

Committee, car hire when necessary, or a bicycle allowance not exceeding 2d. (or in the case of a motor-cycle 3d.) per mile.

3. The employment of the Instructor under this scheme shall not continue beyond the 30th September, 1913, and is terminable at any time previous to that date by the giving of four weeks' notice in writing on either side.

4. It will be the duty of the Instructor to give his whole time to the work and to do all in his power to further the interests of horticulture and bee-keeping in the county; to give demonstrations and, if approved, to deliver lectures on horticultural subjects, such as soils, manures, vegetable, fruit, and flower cultivation, plant diseases, and insect pests—to visit gardens and orchards, and give practical demonstrations on spraying, planting, pruning and grafting of fruit trees—to conduct such experiments and other demonstrations as may be approved by the Department—to select suitable lands for this purpose—to supervise the culling of the seeds and manures, and the keeping of the plots free from weeds—to give instructions in the principles and practice of modern bee-keeping—to deal with diseases of bees, plants, and trees—to advise farmers, cottagers, and others interested in land, as to the planting of trees, &c. for shelter and other purposes—to reply to letters from those seeking his advice on horticultural and bee-keeping subjects—to give practical out-door demonstrations to students attending winter agricultural classes—to report to the Department and to the County Committee on the progress of his work either weekly or otherwise, as may be required.

He will be required to carry out such duties as may be assigned to him in connection with any Order issued by the Department under the Destructive Insects and Pests Acts, 1877 and 1907. Further, it will be his duty to report to the County Committee the names and addresses of persons in the possession of bushes or trees on which he has detected or has reasonable grounds for suspecting the existence of any disease or pest referred to in such orders.

5. The Instructor shall report to the County Committee on all cases of foul brood which may come under his notice, and shall act as Inspector of the County Committee for the purposes of the Bee Pest Prevention (Ireland) Regulations, 1909.

6. For the purposes of this scheme, the County Committee will find it convenient to divide the county into a number of districts or circuits in which the Instructor should, as far as possible, work in turn. The Instructor shall visit gardens, orchards and apiaries in the district, and give such information on practical subjects as the circumstances of the case, may suggest. In cases, however, where an Instructor may be employed to give instruction in bee-keeping only it will not be necessary to divide the county into circuits. In such instances demonstrations can be arranged at centres from which applications have been made through the Secretary of the County Committee for his services.

The County Committee alone are responsible for the selection of centres for demonstrations. It is desirable, however, that the Instructor should be consulted in the matter.

7. It will be the duty of the County Committee to select centres at which demonstrations shall be given.

In selecting centres the County Committee should have particular regard to districts in which lectures and demonstrations may not have been given in previous years.

It will also be the duty of the County Committee to undertake the responsibility of seeing that the Instructor's time is fully and usefully employed.

The County Committee shall keep a separate account of all expenditure under this scheme, and shall furnish detailed statements of such expenditure as may from time to time be required by the Department.

The Secretary of the County Committee shall keep an inventory, and be responsible for the custody, of all equipment provided for the purpose of this scheme.

8. Where it is considered desirable, with the approval of the Department, to arrange for lectures or demonstrations, the lectures should be given in schoolrooms or other suitable rooms in the evenings, and should be held in rural centres. Towns and the larger villages should be avoided, as experience has shown that the greatest success attends those lectures which are given in the rural parts of a county. The local committee at each centre should be responsible for appointing a representative chairman for each lecture, and should undertake to have posters and handbills, which will be supplied by the Secretary of the County Committee, effectively displayed and distributed throughout their district. Copies of these posters and handbills should be forwarded to the Department at least a week prior to the commencement of each course of lectures. Each lecture should be followed by a discussion, during which persons interested in horticulture and bee-keeping will be invited to ask questions.

The demonstrations should be held in the evenings, as far as possible. The horticultural demonstration plots should be utilised for this purpose.

9. The County Committee may arrange with approved nurserymen to supply trees, &c. at special prices to residents in the county, or may purchase fruit, forest and other trees, shrubs, or plants, in bulk, and resell them at cost price, including carriage, to farmers and other residents in the county. As, however, it has come to the knowledge of the Department that trees and plants infested with disease have been imported into Ireland, it will be necessary for County Committees who intend to put this clause into operation to invite from approved nurserymen tenders for the supply of trees, &c., to be guaranteed free from disease, and before acceptance to submit the tenders to the Department on or before 1st day of January, 1913. The Department may, if they think it advisable, inspect the trees, &c., that are offered for sale, and satisfy themselves that the trees, &c., are suitable and free from disease.

2. Subject to the approval of the Department, the County Committee may, if they think fit, make regulations confining to persons of small means the right to participate in any arrangement made by the Committee under the preceding paragraph.

10. In each circuit one demonstration plot may be provisionally selected for the purpose of growing vegetables, fruit, and flowers, and showing improved methods of cultivation, but no new plots shall be selected in a county if a sufficient number of suitable plots established in previous years is being continued.

Before sanctioning the establishment of a new plot the Department must be satisfied as to the suitability of the site, &c. (See Clause 11.)

Demonstration plots under this scheme may not be established in connection with National or other primary schools or teachers' residences.

(a) In counties in which a sufficient number of suitable plots, approved by the Department under this scheme, already exist, the Committee shall make provision for the continuance of the plots at a cost not to exceed £1 per plot. (See List A.)

It is not desirable to continue the grant to any plot for more than three years.

All requisite labour must be given gratuitously by the owner of the plot who will be entitled to the produce.

(b) In cases where it is proposed to establish new plots the Department will require compliance with the following regulations:—

(1) Plots must not exceed a quarter of an acre in extent, or be less than one-eighth of an acre (quarter acre plots are recommended).

(2) No new plot shall be established save at a convenient centre adjacent to a main road.

(3) Plots should be selected on sites which are properly fenced.

(4) The aspect of each plot and the nature of the soil must be suitable for the cultivation of vegetables and fruit. Necessary improvements, such as fencing and drainage, must be carried out, and when required farm-yard manure must be supplied, by the plot owner without expense to the Committee.

[95]

(5) The owner of the plot must sign an undertaking on the prescribed form to continue the plot for three years.

(6) The necessary labour must be given gratuitously by the persons providing the plots—the produce of which will be their property.

The cost of trees, &c., required for planting a new plot must not exceed £2. (See List B.)

[*NOTE*.—The Department recommend that allotments attached to labourers' cottages should be selected for the establishment of new demonstration plots subject to the foregoing conditions.]

(c) The County Committee shall forward to the Department on the prescribed form, not later than the 1st of January, a list of demonstration plots selected for the year, accompanied, in the case of new plots, by a detailed report from the Instructor.

11. The Department's approval in writing must be obtained before any expense is incurred in connection with the establishment of a plot.

12. No action shall be taken by the County Committee towards putting this scheme, or any part thereof, into operation until the sanction of the Department has been obtained in writing.

13. In all matters of dispute relating to this scheme the decision of the Department shall be final.

LIST A.

RECOMMENDED FOR HORTICULTURAL DEMONSTRATION PLOTS
ALREADY ESTABLISHED.

Vegetables.						Quantity.
Variety.						
Penn.	..	..	..	..	..	1 qt.
Cabbage, Early.	..	..	..	..	..	1 oz.
— Savoy.	..	..	..	..	..	1 oz.
Brussels Sprouts	..	..	..	..	..	1 oz.
Broccoli.	..	..	..	..	..	1 oz.
Carrots	..	..	..	..	..	1 oz.
Parsnips.	..	..	..	..	..	1 oz.
Onions, Spring.	..	..	..	..	..	1 oz.
— Autumn.	..	..	..	..	..	1 oz.
Leek.	..	..	..	..	..	1 oz.
Lettuce.	..	..	..	..	..	1 oz.
Flowers.						Quantity.
Variety.						
Sweet Pea.	..	..	..	..	..	1 packet.
Mignonette.	..	..	..	..	..	1 "
Candiot.	..	..	..	..	..	1 "
Wallflower.	..	..	..	..	..	1 "
Nasturtium.	..	..	..	..	..	1 "
Artificial Manures.						
Sulphate of Potash.	..	..	..	..	..	3 st.
Nitrate of Soda.	..	..	..	..	..	3 st.
Superphosphate.	..	..	..	..	..	4 st.

LIST B.

RECOMMENDED FOR NEW HORTICULTURAL DEMONSTRATION PLOTS.

Fruit and Vegetables.

Variety.	Quantity.
Apple Trees,	6
Black Currants,	6
Gooseberries,	6
Rhubarb,	3
Potatoes, Early,	4 st.
————— Late,	4 st.
Peas,	1 qt.
Cabbage, Early,	1 oz.
————— Savoy,	1 oz.
Broccoli,	1 oz.
Brussels Sprouts,	1 oz.
Carrots,	1 oz.
Pennips,	1 oz.
Onion, Spring,	1 oz.
————— Autumn,	1 oz.
————— Potato,	1 st.
Leek,	1 oz.
Lettuce,	1 oz.

Flowers.

Roses,	6
Sweet Pea,	1 packet.
Mignonette,	1 "
Candituff,	1 "
Wallflower,	1 "
Nasturtium,	1 "

Artificial Manures, etc.

Sulphate of Potash,	3 st.
Nitrate of Soda,	3 st.
Superphosphate,	4 st.
Potato Sprouting Boxes,	6

Scheme No. 15.
[Revised.]

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SCHEME FOR ENCOURAGING IMPROVEMENT IN
THE MANAGEMENT OF CREAMERIES AND AUXILIARY
CREAMERIES.

1. GENERAL REGULATIONS.

1. The object of this Scheme is to encourage improvement in the manufacture and marketing of dairy produce by providing facilities for obtaining advice on technical and business methods affecting the management of creameries and auxiliary creameries.

[97]

2. For the purpose of this Scheme :—

(a.) The term "creamery" shall mean premises adapted and utilised for the manufacture of butter from cream which has been separated from milk by means of centrifugal force applied by mechanical power. Provided that the premises are not, and do not require to be, registered under the Sale of Food and Drugs Acts, 1875 to 1907, and that in the ordinary course of the business on every day on which milk or cream is treated at the premises the quantity so dealt with is sufficient to make at least 56 lbs. of butter.

(b.) The term "auxiliary creamery" shall mean any premises adapted and utilised for the separation of cream from milk by means of centrifugal force applied by mechanical power but not utilised for the manufacture of butter. Provided that the premises are not, and do not require to be, registered under the Sale of Food and Drugs Acts, 1875 to 1907, and that in the ordinary course of business on every day on which milk or cream is treated at the premises the quantity so dealt with is sufficient to make at least 28 lbs. of butter.

(c.) The term "creamery butter" shall mean butter which has not been blended nor re-worked and which has been made in a creamery from cream separated from milk by centrifugal force applied by mechanical power.

(d.) The term "year" shall mean the twelve months commencing on the 1st January and terminating on 31st December.

3. Any creamery or auxiliary creamery, from which application (on Form A 175, signed by the proprietor or by the president or chairman of the society or company owning the creamery or auxiliary creamery, as the case may be, and by the manager thereof) is duly received and accepted by the Department, will be inserted on the list of creameries and auxiliary creameries which are visited by the Department's Inspectors in Dairying. Provided that a creamery at which cream or milk is received from one or more auxiliary creameries which are under the control of the proprietors of the creamery will not be entered or retained on the list in question unless all the auxiliary creameries referred to are at the same time entered or retained on the list. On the occasion of each ordinary visit all necessary advice will be afforded on matters relating to creamery management, and a report embodying the Inspector's observations on the condition and working of the creamery or auxiliary creamery visited may be entered in a special report book to be supplied by the Department, and to be carefully preserved at the creamery or auxiliary creamery, as the case may be, and produced for the inspection of the Department's officers when so required. Supplementary reports will be furnished, as may be thought fit, in special circumstances, e.g., when suggestions for machinery and sketch-plans or notes for alterations in buildings are required.

4. A creamery or auxiliary creamery from which application on Form A 175 is accepted will be visited by the Department's Inspectors until notification is given to the contrary on either side. A creamery or auxiliary creamery on the list of those receiving visits from the Inspectors at the date of publication of the scheme will be considered as entered for visits under this Scheme, unless notification to the contrary is received.

5. Applications (on Form A 174, signed by the proprietor or by the president or chairman of the society or company owning the creamery or auxiliary creamery, as the case may be, or by the manager thereof) may be made for special visits of the Inspectors for certain purposes, e.g., the preparation of sketch-plans and notes for the construction or alteration of buildings, or suggestions for machinery.

Applications on Form A 174 will be considered only from creameries and auxiliary creameries included in the list of those visited by the Inspectors in connection with applications on Form A 175.

6. The premises and equipment and the manufacturing operations and business methods of creameries and auxiliary creameries entered on the list of those visited by the Department's Inspectors must be open at all reasonable times to inspection by the Department.

7. The Department may, without assigning any reason, refuse to send an Instructor to any creamery or auxiliary creamery.

8. The Department will publish from time to time a List containing the names and addresses (with such other particulars as may be thought fit) of those creameries and auxiliary creameries entered for inspection which satisfy the Department in the following matters :—

- (1.) That proper care has been taken by the proprietors and staff to secure that the milk or cream dealt with at the creamery or auxiliary creamery is supplied in a clean condition and in clean vessels.
 - (2.) That proper care has been taken by the manager and staff to maintain cleanliness and order in the management and condition of the creamery or auxiliary creamery.
 - (3.) That the book-keeping and business methods are efficient and that the manufacturing operations are properly carried out.
 - (4.) That the buildings and equipment are in good condition and adequate for the business.
 - *(5.) That suitable packages are used for butter, and in the case of 56 lb. boxes and 112 lb. keils that they conform to the standard specifications (see Leaflet No. 60). Strict adherence to the requirements of the specification in regard to the strength and capacity of the packages will be regarded as essential.
 - *(6.) That, if the creamery is included in the latest published List, butter is forwarded to each of the Surprise Butter Inspections held by the Department after the date of publication.
- [Failure to forward duly a package of butter from a creamery to any one Surprise Butter Inspection will, except in circumstances which in the opinion of the Department afford a satisfactory excuse for such failure, disqualify the creamery for inclusion in the next List to be published by the Department.]
- * Not applicable in the case of auxiliary creameries.

SURPRISE BUTTER INSPECTIONS.

9. On a number of occasions at the option of the Department a telegram may be forwarded to any creamery on the latest published List of creameries (see clause 8), requesting the recipient to "send butter to-day to Department's Surprise Inspection." Provided that a creamery which is removed from the List of those visited by the Department's Inspectors in Dairying or which fails to comply with clauses 8 (1), 8 (2), 8 (3), 8 (4), or 8 (5) of this scheme shall not be entitled to participate in the Inspections.

The butter shall be sent to an address in Dublin or elsewhere, which will be communicated to the Manager of the creamery.

10. Between the 1st October and 1st May the telegrams will be issued on Mondays, Wednesdays and Fridays only.

11. The butter at each Inspection will be judged one or more times by one or more persons appointed by the Department, and in one or more seasons according as the Department may consider desirable.

12. The following scale of points will be adopted as the basis in judging the butter sent to the Inspections :—

Flavour,	60 points.
Texture	30 "
Colour,	5 "
†Packing and finish	5 "
Total,	100 points.

† See Clause 8 (5).

A schedule giving in such form as the Department may decide the results of the judging of the butter received from each creamery participating in the Inspection, will be issued after each Inspection to all the participating creameries. In addition notes of any particular defect or defects observed

[99]

in any lot of butter may be communicated to the manufacturer for the purpose of indicating the points in which improvement is especially required. If so desired an Instructor in Dairying will be directed to visit the creamery for the purpose of assisting the Manager to remedy any defect, which can be most satisfactorily dealt with by means of such assistance.

13. The following conditions must be complied with in respect of each lot of butter forwarded to the Inspections :—

- (1.) The butter forwarded must be a sample of the ordinary creamery butter made at the creamery on the day on which the telegram is received, from cream separated on a preceding working day, and must be forwarded by passenger train, carriage paid, on the day on which the telegram is received.
- (2.) The quantity of butter forwarded must be either 56 lbs. or 112 lbs. packed in a box, keg, or keel, similar to those in regular use at the creamery. In special circumstances the Department may, however, in the case of Inspections held between 1st October and 1st May, accept a smaller quantity of butter.
- (3.) Excepting the direction labels supplied by the Department there must be no mark or label in or on the butter which might indicate its origin.
- (4.) The carrying company's receipt must be transmitted to the Department by post on the day on which the butter is forwarded. Unless the carrying company's receipt is received at the office of the Department by the ordinary postal delivery on the morning of the day following that on which the telegram is despatched the butter will be liable to be disqualified.

Failure to comply with any one of the foregoing conditions will render butter in respect of which such failure takes place liable to be disqualified from participating in the Inspection to which it is forwarded.

14. The butter forwarded for the Inspections will be paid for by the Department at the end of the year. The prices given will be based on the current market rates prevailing for the various classes of butter at the dates on which the telegrams are despatched, and shall be determined by the judges.

Provided that any butter which reaches the Department in an unsatisfactory condition or which contains defects which, in the opinion of the Department, should be seen by the manufacturer, may be returned to him at his own risk, and will not be paid for.

15. The Department may, without assigning any reason, refuse to accept for the Inspections butter from any creamery.

16. In all cases of dispute in matters connected with any part of this Scheme the decision of the Department shall be final.

LOCAL SURPRISE BUTTER INSPECTIONS.

The Department are prepared to devote portion of their funds to encouraging Local Surprise Butter Inspections carried out by creamery proprietors and managers themselves.

Creamery proprietors and managers desirous of establishing a system of Local Surprise Butter Inspections in any district in Ireland should first ascertain the number of creameries from which butter would be regularly sent to the Local Inspections. A Local Association representative of the proprietors and managers of all the creameries which participate in the Local Inspections should then be formed, and a Secretary should be appointed. The duties of the Secretary should be to conduct all correspondence and business in connection with the Local Inspections, subject to such regulations as the Local Association may prescribe with the approval of the Department. The Department will be prepared to consider an application from a duly constituted Association of this kind for a grant towards the expenses of holding Local Surprise Butter Inspections.

The grant to be made by the Department will be subject to the following conditions:—

- (1.) That a sufficient number of creameries participate regularly in the Inspections.
- (2.) That all the regulations made by the Local Association are submitted to the Department for approval and are approved by the Department.
- (3.) That a proportion of the cost of the Inspections is contributed by the proprietors of participating creameries.
- (4.) That the Local Association accepts complete responsibility for the proper carrying out of the Inspections.
- (5.) That the Inspections are carried out strictly in accordance with the regulations as prescribed by the Local Association and approved by the Department.

CERTIFICATES.

An examination will be held annually in March in technical subjects as applied to creamery management, and a certificate of having passed the examination will be awarded to successful candidates. The subjects of the examination are set forth in Appendix III. Due notice of time and place will be given to applicants.

A special certificate designated the "creamery manager's certificate" will be granted to candidates who having passed the examination in technical knowledge satisfy the Department with regard to their practical ability as creamery managers.

Applications for admission to the examination should be made on Form A 137, to be obtained from the Department, and must be accompanied by a deposit of £1, which will be returned if the candidate presents himself for examination, or if his application is not accepted.

WINTER COURSES OF INSTRUCTION.

During the winter a course of instruction in the subjects of the examination for Certificates will be provided. This course usually occupies five months approximately, commencing in October and terminating in March. At the close of this course a limited number of the best students will be afforded facilities for learning the practice of creamery management during the summer in selected creameries. Such students will receive a maintenance allowance at the rate of ten shillings per week, in addition to free instruction, while in attendance at the creamery. Free places at the course will be offered to a limited number of bona fide managers of creameries or auxiliary creameries of at least three years' standing.

Short courses of instruction for creamery managers and butter makers may also be provided at suitable local centres.

Attendance at the annual course of instruction for students of agriculture at the Albert Agricultural College, Glasnevin, is recommended as a preliminary general training for young men who may intend to become creamery managers.

SCHOLARSHIPS FOR STUDENTS OF CREAMERY MANAGEMENT.

One or more scholarships, tenable at the Royal College of Science, Dublin, may be offered yearly to students who desire to specialise in subjects relating to the management of creameries. Particulars as to the date, place, and subjects of examination will be published by the Department in due course.

TRAINING OF DAIRYMAIDS.

Girls who desire to become dairymaids in creameries, and who have attended two terms either at the Munster Institute or the Ulster Dairy School will, on attaining the required standard at their second terminal

[101]

examination, be admitted to the third term course at the Munster Institute or Ulster Dairy School. On completion of this course a limited number of these pupils will be afforded facilities for learning the practical work of a dairymaid in selected creameries in Ireland. In selecting the pupils to whom these facilities will be offered, regard will be had to (1) their knowledge of dairying as evidenced by their answering at the terminal examination at the conclusion of their course of instruction as third-term students, and (2) their physical suitability for the work of a dairymaid in a creamery. Each selected pupil will receive a maintenance allowance at the rate of ten shillings per week in addition to free instruction at a creamery for a period of twenty weeks. A pupil who has had a season's experience of the work of a dairymaid at a creamery or who has attended for one term at a School of Rural Domestic Economy before entering the Munster Institute or the Ulster Dairy School will be regarded as eligible for a course of training as pupil dairymaid after two terms at the Munster Institute or Ulster Dairy School provided she attains the required standard and is regarded as physically suitable for the work.

The Regulations of this Scheme are subject to revision from time to time.

The Appendices and List of Creameries and Auxiliaries published by the Department in connection with this Scheme are printed separately, and may be obtained free of charge, and post free, on application to the Secretary, Department of Agriculture and Technical Instruction for Ireland, Upper Merrion Street, Dublin. Letters of application so addressed need not be stamped.

August, 1912.

Scheme No. 16.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

SCHEME OF LOANS FOR THE ERECTION OF VILLAGE HALLS.

The Department are prepared to consider a limited number of applications for loans to aid in the erection and equipment of new buildings, or the adaptation of existing buildings, to be used as Village Halls in rural parts of Ireland, subject to the following conditions:—

1. Application must be made on the prescribed form, which can be obtained free from the Department.

2. The amount of any one loan to be advanced by the Department under this scheme shall not exceed two-thirds of the approved cost—the balance to be raised locally by means of private subscriptions or otherwise.

The loan shall be issued in such sums and at such times as the Department may decide.

3. A Committee of not less than three or more than nine solvent ratepayers resident in the district shall be formed. The buildings and equipment shall be vested in this Committee who shall declare a Trust that the said buildings and equipment are held by them as Trustees for public purposes, i.e., for the promotion of "the purposes of agriculture and rural industries as defined by the Agriculture and Technical Instruction (Ireland) Act, 1899," and shall make provision to the satisfaction of the Department for the appointment of new Trustees pursuant to these conditions.

4. The Trustees when applying for a loan, shall furnish the Department with a statement setting forth the special object in view in providing a Hall, together with such details as to the site, particulars of tenure, &c., as the Department may require.

5. The Trustees shall not take any steps to begin the work of building or to incur any liability until the Department have signified in writing their approval of the design, plans, and estimate of the cost of erection &c., of the proposed Hall.

6. Before the amount of the loan is issued the Department will require to be satisfied that the sum contributed locally has been actually collected and lodged in bank.

7. The sum advanced by the Department together with the money contributed locally for the purpose shall be expended by the Trustees on the building and equipment of the Hall in the manner approved by the Department.

8. The Department must be satisfied that the Trustees have made adequate provision for the permanent and proper upkeep of the buildings and equipment.

9. The sum advanced by the Department shall be duly charged as a first charge on the land and buildings. In addition, the Trustees shall enter into a Bond to repay the amount of the loan in not more than ten equal annual instalments payable on the first day of June in each year with interest at the rate of two-and-a-half per cent. per annum on the outstanding balance; provided, however, that the Trustees shall be at liberty to repay the full amount or the balance of the loan at any earlier period. The Bond and Deed of Charge referred to in this clause, and the Declaration of Trust referred to in clause 3 shall be in such form, and shall contain such provisions as the Department may prescribe.

10. The Trustees shall have the sole management of the Hall; shall pay all the rent and other charges thereon, and shall keep the building and furniture adequately insured, and in proper repair, to the satisfaction of the Department.

11. It shall be a condition of the loan that the Committee or Committee of Agriculture and Technical Instruction for the county in which the building is situated, and the Department shall have prior claim for the use of the Hall in connection with the purposes of any approved County Scheme. On all occasions when the Hall is required either by a County Committee or by the Department the Trustees shall, at their own cost, have the Hall sufficiently lighted and warmed.

Subject to the foregoing the Trustees may permit the Hall to be used for entertainments or for any other purpose of which they may approve.

12. The Trustees may fix a scale of fees for use of the Hall by a County Committee or the Department under the preceding clause, or by any other person or body for a purpose approved by the Trustees—provided that such scale so far as it refers to the use of the Hall by a County Committee or by the Department for the purposes of Agriculture and Technical Instruction, shall first be submitted to the Department for their approval in writing. All fees so received shall be applied by the Trustees in repayment of the loan, and for the purpose of defraying or assisting to defray expenditure in connection with the rent of the site of Hall and the upkeep of the buildings and equipment.

13. The Trustees shall keep accurate accounts of all receipts and expenditure in connection with the buildings and equipment, and shall permit same to be inspected at any time by the Department's Officers.

14. The Department shall have the right at all times to visit, inspect and examine the buildings and equipment.

15. If prior to the repayment of the loan the Trustees or any of them, or any Trustee appointed subsequent to the issuing of the loan dies, or is desirous of being discharged from the Trust, or goes or resides out of Ireland for a continuous period of twelve calendar months, and neglects or refuses to carry out the Trust, or becomes unable to execute the Trust, the surviving or continuing Trustees or Trustee shall, subject to the Department's approval, appoint a new Trustee or Trustees, and in case that any such surviving or continuing Trustee shall neglect or refuse to exercise power of appointment, the appointment shall be made by the Department.

16. In all matters relating to loans under this Scheme, and to the regulations of the Scheme the decision of the Department shall be in every respect final and conclusive.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SCHEME OF LOANS FOR THE ERECTION OF FENCING IN
COUNTIES CONTAINING CONGESTED DISTRICTS.

The Department are prepared to consider a limited number of applications for loans for the erection of wire fencing on the lands of small occupiers resident in counties containing congested districts, subject to the conditions mentioned below.

These loans are not intended for occupiers who can afford, or may reasonably be expected to pay, cash for the required fencing, nor for cases in which having regard to the position of the occupier and the extent of the proposed fencing, application for a loan should be made to the Board of Works. The object of these loans is to encourage small occupiers to fence in their arable land or to fence off mountain grazing so as to permit of arable land being properly cropped and laid down with grass and clover seeds.

1. An application for a loan must be made on the prescribed form, which can be obtained free from the Department.

2. No application for a loan will be considered unless in cases where the Department are satisfied that each applicant is a person of very small means.

3. Save in exceptional circumstances no application for a loan will be considered from any farmer whose gross Poor Law Valuation exceeds £20.

4. In no case shall a loan be granted to an individual for a smaller sum than £5 or a larger amount than £35. When the loan is made to two or more persons the loan shall not exceed £35 for each person who is a party to it.

5. Loans will be granted for the purpose of erecting wire fencing

(a) for the boundary fence of a holding;

(b) for separating arable land from mountain grazing or similar rough pasture; and

(c) for the internal fencing on the farms of applicants where wire fencing is the most suitable for the purpose.

6. Subject to the provisions of Clause 7, loans of £5 up to and including £15 shall be repayable within five years; and loans exceeding £15 and not exceeding £35 shall be repayable within ten years. In the case of a joint loan to two or more persons, the Department will decide whether the loan shall be repayable in five or ten years as the case may be.

7. In the case of loans to individuals, the applicant and two approved solvent sureties shall sign a form of guarantee to repay to the Department the amount of the loan in ten (or twenty, as the case may be) equal half-yearly instalments on the 1st January and the 1st July in each year, together with interest at the rate of 3 per cent. per annum on the outstanding balance. In the case of joint loans to two or more persons the security shall be in the form of a joint and several bond.

For example, a loan of £10 granted on the 1st January, 1907, will be repayable as follows:—

(Instalments of £1 with

		Interest on £10 for six months at 3 per cent.)	
£1 : 3 : 0	on 1st July, 1907	9	do.
£1 : 2 : 9	" 1st January, 1908 (do.	8	do.
£1 : 2 : 4	" 1st July, 1908 (do.	7	do.
£1 : 2 : 1	" 1st January, 1909 (do.	6	do.
£1 : 1 : 9	" 1st July, 1909 (do.	5	do.
£1 : 1 : 6	" 1st January, 1910 (do.	4	do.
£1 : 1 : 2	" 1st July, 1910 (do.	3	do.
£1 : 0 : 11	" 1st January, 1911 (do.	2	do.
£1 : 0 : 7	" 1st July, 1911 (do.	1	do.
£1 : 0 : 4	" 1st January, 1912 (do.		

8. The person to whom a loan is granted shall be at liberty to repay the full amount or the balance of the loan, with interest, at any earlier period than that provided for in the form of guarantee.

9. When satisfied that the approved applicant for the loan has made proper preparation for proceeding with the work, the Department will supply the necessary fencing materials as well as the services of a foreman to superintend, for a limited period, the erection of the fencing. The farmer on whose lands the fencing is to be erected must at his own expense provide such other labour as may be required.

10. The Department reserve the right to refuse any application for a loan without assigning any reason for such refusal.

11. The decision of the Department in all matters relating to these loans shall be final and conclusive.

Scheme No. 18.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SCHEME OF LOANS FOR THE PURCHASE OF AGRICULTURAL
IMPLEMENTS, &c.

The Department are prepared, subject to the undermentioned conditions, to grant a limited number of loans to *bona fide* farmers for the purchase of farm implements and machinery, including Horse Rakes, Thrills Cutters, Potato Diggers, Mowers, Binders, small Threshing Machines, Hand Separators, and other implements and machines, which may be approved on application.

It is suggested that a person intending to apply for a loan should, subject to clause 3, consult the County Agricultural Instructor as to the pattern of machine which would best suit his requirements.

1. Application must be made on the prescribed form, which may be obtained free from the Department.

2. The Department will need to be satisfied that the applicant is a *bona fide* farmer of small means, who could not reasonably be expected to pay cash for the required machine.

3. A loan will not be granted save for the purchase of a machine of a price and pattern approved by the Department, provided that a machine costing less than £6 will not be approved for the purposes of this scheme.

4. Before the loan is granted the applicant shall—

- (a) Lodge with the Department one-fourth of the approved purchase price, together with the necessary stamp duty, etc., and
- (b) With two or more solvent sureties, to be approved by the Department, enter into a Bond or such other form of guarantee as the Department may require, to secure repayment of the Department of the amount advanced by them, viz., three-fourths of the approved purchase price, in equal annual instalments, payable on 1st November in each year, together with interest at the rate of three per cent. per annum on the outstanding balance. The maximum number of annual instalments shall be as follows:—

For a loan not exceeding Fifty Pounds,	..	Three.
For a loan exceeding Fifty Pounds,	..	Five.

5. The machine will be ordered by the Department, who will pay the vendor the approved price as soon as the applicant has notified the Department that he has taken delivery of the machine. Any applicant ordering the machine direct from the vendor without having previously obtained the permission in writing of the Department will not be granted a loan.

6. The applicant shall, during the period from the delivery of the machine until the payment of the last instalment of the loan to the Department, maintain the machine in good order and repair, and shall pay and defray all cost of repairs and of providing new parts for, and expenses in relation to, the said machine, and further shall not during the above period sell or otherwise dispose of the machine without having previously obtained the consent in writing of the Department.

7. The Department will not be responsible in any way in the event of a machine purchased under this scheme failing to work, or failing to work satisfactorily.

8. The Department reserve the right to inspect the machine at any time and to require the applicant to insure the machine against damage by fire until the loan has been fully paid off.

9. The Department also reserve the right to refuse any application for a loan without assigning any reason for such refusal.

10. The decision of the Department in all matters relating to this scheme shall be final and conclusive.

February, 1913.

Scheme No. 19.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

SCHEME OF LOANS FOR THE ERECTION OF SMALL IRON HAY BARN.

The Department are prepared to consider a limited number of applications for loans for the erection of hay barns on the holdings of small occupiers, subject to the conditions mentioned below.

These loans are not intended for occupiers who can afford, or may reasonably be expected to pay, cash for the required barn, nor for cases in which, having regard to the position of the occupier, and the cost of the proposed barn, application for a loan should be made to the Board of Public Works.

1. An application for a loan must be made on the prescribed form, which can be obtained free from the Department.

2. An application for a loan will not be considered unless in cases where the Department are satisfied that the applicant is a person of small means.

3. Save in exceptional circumstances, an application for a loan will not be considered from any person the gross Poor Law Valuation of whose holding or holdings exceeds £20.

4. A loan will be granted only for an amount of less than £35. A person requiring a loan of £35 or over should apply to the Board of Public Works.

5. A loan will not be made save for a barn to be erected in accordance with the Department's standard plan I. or II. and specification. (Copies can be obtained free on application.)

6. The applicant must provide, at his own expense, such materials, labour, carting, etc., as he may be required to supply in accordance with the specification and the contractor's tender.

7. The applicant and two or more approved solvent sureties shall sign a bond or such other form of guarantee as the Department may require to secure repayment to the Department of the amount of the loan in ten equal half-yearly instalments on the 1st January and the 1st July in each year, together with interest at the rate of 3 per cent. per annum on the outstanding balance, the first instalment to be payable on either the gala day next following the issue of the loan, or the second next gala day as the Department may decide.

8. The person to whom a loan is granted shall be at liberty to repay the full amount or the balance of the loan, with interest, at any earlier period than that provided in the bond or form of guarantee.

9. The applicant should, if possible, obtain at least two tenders for the erection of the barn in accordance with one of the Department's standard plans and specification, but only the selected tender need accompany the application form. In any case in which the Department decide to grant a loan they will instruct the contractor to proceed with the erection of the barn. Any applicant ordering a barn direct from a contractor without the permission of the Department will not be granted a loan. When the Department are satisfied that the barn has been duly erected in accordance with the approved plan and specification, and when the bond guaranteeing repayment of the loan has been duly completed and lodged with them, the Department will pay to the contractor such sum not exceeding the amount of the loan as they may determine.

10. The applicant shall, during the period from the erection of the barn until the payment to the Department of the last instalment of the loan, maintain the barn in good order and repair to the satisfaction of the Department, and shall pay and defray all cost of repairs and of providing new parts and expenses in relation to the said barn, and further shall not during the above period sell or otherwise dispose of the barn without having previously obtained the consent in writing of the Department.

11. The Department reserve the right to inspect the barn at any time and to require the applicant to insure the barn against damage by fire until the loan has been fully paid off. The Department also reserve the right to refuse any application for a loan without assigning any reason for such refusal.

12. The decision of the Department in all matters relating to these loans shall be final.

June, 1913.

UNDER REVIEW.

Scheme No. 20.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

SCHEME FOR ENCOURAGING IMPROVEMENT IN THE DAIRY CATTLE OF IRELAND THROUGH THE SELECTION AND REGISTRATION OF COWS.

Dairying, as well as the raising of store cattle, is one of the principal branches of agriculture pursued in this country. It is, accordingly, of importance that the milking properties of Irish cattle should be preserved and improved. In dairy herds the yield and quality of milk given by each cow largely determines whether the animal realises a profit or entails a loss to the owner; consequently it is essential that farmers should know exactly the quantity and quality of milk which each cow yields per annum. At the same time, as young cattle are a considerable source of revenue, it is desirable that the good milking cow should be of the type likely to produce a calf which will be of value for both beef and milk. With the object of encouraging the improvement of Irish dairy cattle, the Department have decided to put into operation the following scheme.

Every owner of dairy cows is strongly advised to join a cow-testing association in his district, or, if there is no such association, to help as far

as practicable to form an association in his locality. Much greater results can be attained by an association than by the isolated efforts of individuals. These associations enable their members not only to ascertain the quantity but also the quality of the milk yielded by each of their cows, and they provide a means whereby a cow owner can tell which of his cows are worth submitting for inspection with a view to their registration.

After the year 1912, applications for the inspection of cross-bred cows for the purposes of this Scheme will not be accepted, save in very exceptional circumstances, unless made through a cow-testing association complying with the regulations in Clause 8.

The Department are prepared to encourage the formation of cow-testing associations in the manner indicated in Clauses 8 and 9.

1. The Department will keep a Register of dairy cattle (hereinafter referred to as the Register) in which cows and their progeny may be entered, subject to the provisions of this scheme. The inspection of cows with a view to entry on the Register will be carried out by the Department.

INDIVIDUAL OWNERS.

2. Owners of good cross-bred shorthorn, and pure-bred dairy cows may apply on the prescribed form for the inspection of their stock by the Department as regards :—

- (a) General appearance,
- (b) Milk yield.

Only good cows of a distinct and well-defined type are eligible.

3. Applications on Form A 63 for the inspection of cows which have not been tested by a cow-testing association should be lodged with the Department between 1st July and 31st August, 1912, and must be accompanied by a fee of 2s. 6d. in respect of each cow entered for inspection. [Applications for the inspection of cows tested by a cow-testing association should be made on Form A 416 in accordance with the provisions of Clause 8 (IV).]

Cow owners presenting animals for inspection will be refunded all fees paid by them, except in respect of cows which are provisionally selected for registration under Clause 4.

4. Cows entered under Clause 2 will be provisionally selected, on the ground of general appearance, at local shows, local exhibitions, or at such other convenient centres as may be determined by the Department as soon as practicable after 31st August. The Department will give due notice to each cow owner of the centre fixed for the inspection of his animals.

With regard to inspections elsewhere than at local shows, it is to be understood that the Department, save in exceptional cases, cannot undertake to send an Inspector to any district unless at least ten cows from such district are offered for inspection.

All animals provisionally selected for general appearance under this scheme will be suitably marked by the Department for future identification.

Provisionally Selected Cows.

5. Owners of cows provisionally selected under Clause 4 are required to observe the following conditions :—

- (a) To provide themselves with an approved type of machine for weighing milk;
- (b) To weigh the milk yielded by each cow on every seventh day during the milking period (the exact day of the week for each herd will be fixed by the Department), and to record the same on Form A 64, which will be provided by the Department for the purpose;

- (c) To permit their herds to be inspected by the Department at any time; and
- (d) To afford the Department every facility for examining the milk records and the weighing of the milk, and for taking samples of the milk of each selected animal.

6. Form A 64, containing the records kept under Clause 5 (b) shall be forwarded by the owner of the cow to the Department as soon as the milk yield for a milking period (as defined in Clause 14) has been recorded, or at such other time or times as the Department may require.

Owners should forward these Forms at the proper time, without waiting for an application for them from the Department. The Forms should be enclosed in envelopes that will be provided for the purpose by the Department. Postage need not be prepaid on Forms so enclosed.

7. As soon as possible after the receipt of Form A 64, the Department will notify to the owner their decision as to the registration or rejection of the animal whose milk yield is recorded on the Form.

COW-TESTING ASSOCIATIONS.

8. The following regulations apply to Cow-Testing Associations only :—

(I.) A cow-testing association formed for the purpose of this scheme will be required to undertake to comply with the following conditions :—

- (a) Any dairy farmer in the district served by the Association may become a member.
- (b) The association shall secure an entry of as many herds of milking cows as possible, each member of the association being required to enter all his cows.
- (c) The members shall have the milk of each cow weighed on every seventh day (the exact day of the week for each member being fixed by the association). The morning and evening milk shall be weighed and recorded separately on the record sheets (Form A 291) which will be provided by the Department.
- (d) After every weighing a sample of each cow's milk must be taken and preserved until the end of the month, when the composite sample for the month shall be tested for butter-fat.
- (e) The association shall appoint a secretary, whose duties shall be : (i.) to ensure that the weekly records are transferred each month from Form A 291 to the monthly summary book (Form A 288) provided by the Department; (ii.) to ensure that the monthly butter-fat tests are regularly carried out; (iii.) to record in the monthly summary book (Form A 288) the results of these tests, and the calculated number of pounds of butter-fat contained in the milk; and (iv.) to check and certify the milk records and other particulars of cows submitted for inspection by members of the association for the purposes of Clause 5 (IV).
- (f) The record sheets, monthly summary books, list of members of the association, etc., must be open to inspection by the Department at any time.

(II.) When the Department are satisfied that a cow-testing association has been formed, and that suitable arrangements have been made to comply with the foregoing requirements, they will be prepared to supply the Society with the necessary number of record sheets (Form A 291), and monthly summary books (Form A 288).

(III.) If the number of cows for which milk records are kept throughout the year exceeds fifty, the Department will (in a limited number of cases) be prepared for at least one year to make a grant to the secretary at the rate of one penny per cow per monthly test towards the cost of testing the milk for butter-fat. This grant should be supplemented by the contributions of the members.

(IV.) The Department will be prepared to inspect at such centres as may be determined by them all cows which have given, during the milking period covered by the records, a yield of not less than 210 lbs. of butter-fat, provided that the calculated average percentage of butter-fat does not fall below 3 per cent. and the calculated yield of milk below 6,000 lbs. The Department will accept for entry in the Register, on payment of a fee of 2s. 6d. for each cow, all such animals which on the results of the inspection they consider to be of good conformation and well-defined type.

Applications for the inspection of cows should be made to the Department on the prescribed form (A 418), between 1st July and 31st August, and must be accompanied by a certified record of the milk yield of each cow for a complete milking period.

9. The Department are prepared to encourage the formation of Cow-Testing Associations by arranging for the attendance of a lecturer at meetings of dairy farmers to explain the objects and advantages of these associations. Moreover, if in any district where an association does not already exist at least three owners of dairy cows, possessing collectively not less than fifty cows, agree to form themselves into an association, and appoint a secretary, the Department, on application being made by the secretary on behalf of the association, will send one of their instructors to the district to assist in the establishment of the association. Applications in regard to proposed cow-testing associations will be dealt with in the order in which they are received. It is desirable that associations, which are to come into operation in the following year should be formed as soon as possible after 1st November in each year.

REGISTERED COWS.

10. The owner of each registered cow must comply with the following conditions:—

- (a) To have the animal served by a registered dairy bull or a pure-bred bull of her own type. These bulls must be passed by the Department as eligible for a premium.

[Persons who intend eventually to enter the progeny of registered cows in the herd books of their respective breeds must have the cows served by pure-bred bulls. N.B.—A registered dairy bull may be pure-bred.]

- (b) To furnish to the Department on the prescribed form (A 66) within seven days from the date of birth, particulars regarding sex, colour, markings, etc., of each calf produced by a registered cow, and such particulars of the sire and dam as the Department may require; and
- (c) To keep on the prescribed form (A 79) a record of the breeding, date of birth, etc., of progeny, for the purposes of future registration.

11. The female progeny of registered cows served by bulls approved under Clause 10 (a) will be eligible for inspection when about two years old, at a fee of 2s. 6d. each.

12. In cases where the conditions of Clause 10 have been fully complied with, male progeny are eligible for inspection with a view to provincial selection for premiums under the Department's Cattle Breeding scheme, within the limits of age specified therein, and, if so selected, will be entered in the Register as "Registered Dairy Bulls."

Owners of male progeny eligible for inspection should apply on the prescribed form in December for a certificate of eligibility, and for particulars of the show or centre where the animal should be exhibited for inspection.

13. When a registered cow or her calf has been disposed of, the Department must be notified of the fact within fourteen days of the disposal of the animal, and at the same time advised of the name and address of the new owner.

The death of a registered cow or her calf must also be notified to the Department within fourteen days of the death of the animal.

14. For the purposes of this scheme the term "milking period" shall mean the period during which a cow continues to yield milk after calving. Provided that if such period exceeds 45 weeks, the first 45 weeks after calving shall be regarded as the cow's milking period.

15. Cow-testing associations and other persons are permitted to participate in this scheme only on the distinct understanding that it is subject to modification or withdrawal at the discretion of the Department.

16. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

July, 1912.

Scheme No. 21.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

LOANS FOR THE REPAIR AND EQUIPMENT OF MEAL MILLS,
KILNS FOR DRYING, &c.

The Department are prepared to consider a limited number of applications for loans to aid in the repair and equipment of existing mills, etc., or the adaptation of existing buildings to be used as such, subject to the following conditions:—

1. The application must be made on the prescribed form, which can be obtained from the Department.
2. The amount to be advanced by the Department under this scheme shall not exceed two-thirds of the approved cost.
3. The applicant shall furnish the Department with a statement setting forth the special object in view in providing the mill, together with such details as to site, particulars of tenure, etc., as the Department may require.
4. The applicant shall not take any steps to begin the work of repairing, equipping or erecting the building, or incur any liability until the Department have signified in writing their approval of the plans, estimate of cost of repair or of additional buildings, and machinery and equipment, etc.
5. The sum advanced shall be expended in a manner approved of by the Department.
6. The sum advanced shall be duly charged as a first charge on the building, machinery and equipment. In addition, the applicant shall, together with two solvent sureties approved by the Department, enter into a bond to repay the loan in not more than ten equal annual instalments, payable on the first day of January in each year, with interest at the rate of 5 per cent., the first instalment to be repayable, with interest calculated from the date of advance, on the second day following the date of said advance. Provided, however that the borrower shall be at liberty to pay the full amount of the balance of the loan at any earlier period, together with the interest to date.
7. During the period the loan is outstanding, the buildings, machinery and equipment shall be kept in proper repair, and adequately insured, by the applicant at his own expense. The receipts for insurance premiums shall be submitted to the Department when required.
8. The Department shall have the right at all reasonable times to inspect the buildings, books, machinery and equipment.
9. The applicant shall undertake to furnish such reports and to keep such accounts in connection with the working of the mill as the Department may require, and shall submit same to the Department when requested to do so.
10. In all matters relating to loans under this scheme, and to the regulations of the scheme, the decision of the Department shall be in every respect final and conclusive.

In the event of an instalment of principal and interest being in arrear for

[111]

more than four weeks, the Department shall be at liberty to act in any one or more of the following ways at their discretion:—

- (a.) to recover with costs the amount of the instalment of principal and interest from the applicant and his sureties;
- (b.) to recover with costs the outstanding balance of the loan, with interest, from the applicant and his sureties;
- (c.) to take possession of the mill buildings, machinery and equipment, and to sell same in satisfaction of so much of the loan as may not be recovered from the applicant and his sureties.

Scheme No. 22

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

VETERINARY DISPENSARIES IN CONGESTED DISTRICTS.

1. The Department will establish a limited number of Veterinary Dispensaries in the poorer parts of the nine congested counties. For this purpose they propose to subsidise a number of Veterinary Surgeons, whose headquarters are within reasonable distance of the districts to be benefited.

2. In fixing the subsidy to be paid Veterinary Surgeons for their services the Department will take into consideration the poverty of the district, the difficulties of travelling, and whether the district is or is not regularly visited by the Veterinary Surgeon in the ordinary course of his practice.

3. Subsidised Veterinary Surgeons will be required to give advice to all bona fide farmers under £10 valuation and resident in congested districts who seek it either at a dispensary or at the Veterinary Surgeon's headquarters.

4. The term "bona fide farmer" is to be understood to mean a person who derives his means of living mainly from the cultivation of his holding. Each applicant must, if requested to do so, produce evidence that his total valuation does not exceed £10.

5. Subsidised Veterinary Surgeons will be required to attend at certain centres at least fortnightly, or as may be arranged, on days and at hours fixed by the Department, and advertised by them in the district.

6. Subsidised Veterinary Surgeons must also attend when required at the residence of farmers entitled to the benefits of this scheme.

7. The following scale of fees will apply:—

Advice at headquarters or dispensary, 1s. per case.

Simple operations at headquarters or dispensary, 1s. per case.

Severe operations at headquarters or dispensary, 2s. 6d. per case for persons whose valuation is £5 or under, and 5s. per case for persons whose valuation exceeds £5 but does not exceed £10.

Inoculation at headquarters or dispensary, 1s. per case.

Attendance at farmer's residence, 1s. per 2 of valuation, provided the minimum fee is not less than 2s. 6d.

Double fees may be charged after sunset.

8. Medicines supplied by the Veterinary Surgeon to persons entitled to the benefits of this scheme shall be charged for in addition at reasonable prices.

9. Subsidised Veterinary Surgeons will be required to keep at their headquarters and at each dispensary a record of the number and the nature of the cases treated under this scheme, the fees charged therefor, and the amount charged for any medicines supplied.

10. The Department reserve the right to ask each Veterinary Surgeon subsidised under this scheme to give public lectures on veterinary hygiene at a fee to be arranged.

11. The work of each subsidised officer under this scheme shall be subject to inspection by the Department from time to time.

12. The subsidy will be paid at the end of each quarter.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SCHEME FOR ENCOURAGING THE BREEDING OF IRISH
DRAUGHT HORSES.

1. The objects of this scheme are to increase the number and to improve the quality of Irish Draught Horses.

The Regulations issued in 1911 described the type of animal which is was desired to encourage under this scheme as being one free from all trace of English or Scotch Cart-horse blood, standing not less than 16.2 hands high, with short clean flat legs, well set joints and good feet, good head and rein, well laid back shoulders, and displaying throughout its conformation a sufficiency of power to warrant its doing general farm and harness work, and with free and light stepping action.

2. Local exhibitions were held throughout the country in 1911, at which a number of mares were selected by the Department's judges. The mares so selected have been entered in a Register of Irish Draught Mares which is kept by the Department.

3. The Register of Stallions issued annually by the Department in accordance with the regulations of their general Horse Breeding scheme, will henceforth contain, in a separate section, a list of registered stallions of the Irish Draught type which will be available for the purposes of this scheme.

4. Fillies out of mares entered in the Mare Register and got by a registered Irish Draught stallion will, when two years old, be eligible for entry in that Register provided they are passed by the Department as sound and suitable.

A limited number of such registered fillies, selected by the Department and retained for service by an approved registered Irish Draught stallion, will be awarded, on such conditions as the Department may prescribe, a premium of £20 per annum for not more than five seasons provided a live foal resulting from such service during the preceding year is produced during each of the five seasons in question.

5. Colts out of mares entered in the Register and got by registered Irish Draught stallions will, on inspection as two-year olds, be purchased by the Department for a sum of not less than £200 each, provided they are passed by the Department as sound and suitable for registration.

6. The Department, subject to certain conditions to be prescribed by them, will defray the following expenses in respect of the service of each registered mare sent by their instructions to a registered Irish Draught stallion: (a) the approved service fee, which shall not exceed £3 3s. per mare, and (b) where the stallion is located not less than fifteen miles from the mare the cost of carriage of the mare by rail once each way.

7. The provisions of the Department's scheme (No. 1) for encouraging improvement in the Breeds of Horses shall with the necessary adaptations apply to this scheme.

8. The decision of the Department in all matters relating to this scheme shall be final.

MARCH, 1912.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SCHEME OF LOANS TO MEMBERS OF ASSOCIATIONS OF FRUIT
GROWERS.

1. The Department are prepared, subject to the conditions mentioned below, to consider applications for loans for the purchase of fruit trees

[113]

by Associations of fruit growers in counties in which the County Committees of Agriculture employ a Horticultural Instructor.

2. The main object of this scheme is to encourage Associations of occupiers of land in suitable localities to grow fruit, particularly apples, as a farm crop for sale.

3. Persons who desire to grow small quantities of fruit, mainly for use in their own homes, are not eligible for loans under this scheme. Facilities for obtaining fruit trees are afforded to such persons under County schemes of Instruction in Horticulture, particulars of which may be obtained from the Secretaries of the County Committees.

4. Applications shall, in all cases, be made on the prescribed forms, which should be duly completed by the applicants and forwarded direct to—The Secretary, Department of Agriculture and Technical Instruction, Upper Merrion Street, Dublin.

Copies of form of application may be obtained free from the Department.

5. The Department cannot undertake that applications received later than 31st October can be dealt with in time to permit of the necessary preliminaries being carried out during the ensuing season.

6. Loans may be granted to members of an Association of fruit growers (not less than ten in number) in the same locality.

7. A loan will not be granted to members of an Association unless three members at least participate in the loan, and each such member agrees to plant not less than one statute acre, approximately, of land with fruit trees, mainly apple trees.

8. In the case of a loan being granted to members of an Association, the persons participating in the loan shall enter into a joint and several Bond, in such form as the Department may require, for the repayment of the full amount of the loan, with interest thereon at the rate of three per cent. per annum.

9. The Association shall appoint a Secretary, whose duties will include the conducting of all correspondence and business in connection with the scheme, subject to such regulations as the Association may prescribe with the approval of the Department.

10. The Secretary of an Association, any or all of whose members apply for a loan shall furnish to the Department such particulars as the Department may require.

11. A loan will not be granted unless the Department are satisfied—

(a) That the plots of land to be planted are suitable as regards soil and situation ;

(b) That, in general, the circumstances of the case are satisfactory ; and

(c) That the loan is to be applied mainly to the purchase of apple trees.

12. The members of the Association participating in the loan shall agree to afford to any person authorized by the Department such information and facilities for inspection as the Department may require, in order to satisfy themselves in regard to any matter connected with this scheme.

13. A loan will not be granted for a sum less than £20.

14. The amount of the loan must be expended wholly in the purchase of fruit trees, except in cases in which the Department allow portion of the loan to be devoted to either or both of the following purposes, viz. :

(a) purchase of fencing materials ; (b) erection of stores for fruit. No part of the loan may be applied to defray the whole or any part of the cost of labour required for the fencing, preparing, planting, or cultivating of the plot or plots, or of carting materials for any of these or other purposes.

15. Before the amount of the loan is advanced by the Department, each member participating in the loan shall sign the necessary Bond, which, in addition to securing the repayment of the loan, shall require the signatories to comply with the following conditions :—

(a) To expend the amount of the loan in the manner and for the purposes approved by the Department ;

(b) To devote to fruit growing the plots of land approved by the Department for the purpose of the loan;

(c) To prepare the plots in a satisfactory manner;

(d) To fence the plots in a satisfactory manner, the fencing to be completed before any fruit trees are planted;

(e) To plant in each of the approved plots fruit trees of the number, description, and varieties approved by the Department; such trees to be purchased from a nurseryman approved by the Department under the County Horticultural scheme;

(f) To keep the ground around each tree free from grass and weeds for a sufficient distance;

(g) To keep the fencing in a proper state of repair; to cultivate the plots, and generally to manage them to the satisfaction of the Department;

(h) To permit the plots to be inspected at all reasonable times by the Horticultural Instructor for the county, or any person authorised by the Department.

The stamp duty on the Bond shall be paid by the members participating in the loan.

16. When the Department are satisfied that the plots have been fenced (where necessary) and planted in an approved manner, and when they receive the Bond duly completed, as required by Clause 15, the Department will notify the Secretary of the Association that the loan has been granted, and will advance the amount of the loan in such sums and at such times as they may decide. Until such notification is issued any expenditure or liability incurred by the Association or any of its members will be incurred at their own risk.

17. The amount of the loan shall be repaid in ten equal yearly instalments on the 1st November in each year, together with interest at the rate of three per cent. per annum on the outstanding balance. The first instalment shall be payable on the 1st November in the year in which the loan has been granted provided that at least six months shall have elapsed since the date on which the loan or any part of it was advanced. Interest shall be reckoned from the date or dates on which the loan or any portion of it is advanced.

18. The members of the Association to whom a loan is granted shall be at liberty to repay the full amount of the loan, with interest, at an earlier period than that provided for in the Bond.

19. The Department will not be responsible in any way for the success of plots planted with fruit trees purchased by means of loans granted under this scheme, or for providing the owners of such plots with any expert advice, supervision or assistance.

20. The Department reserve the right to refuse any application for a loan without assigning any reason for such refusal.

21. In addition to the loans granted to Associations under the foregoing conditions, the Department may grant loans to individual fruit growers who are desirous of growing fruit on an extensive scale for market in districts where Associations of fruit growers do not exist or cannot be established.

The conditions applicable in the case of loans granted to Associations of fruit growers shall, with the necessary adaptations, apply in case of loans granted to individual growers, subject to the following modifications:

(a) A loan will not be granted to an individual applicant unless the applicant agrees to plant not less than three statute acres with fruit trees;

(b) A loan will not be granted to an individual applicant for a less sum than £10;

(c) In the case of a loan being granted to an individual, the borrower, with two solvent sureties, shall enter into a bond, in such form as the Department may require, for the repayment of the loan, with interest thereon at the rate of three per cent. per annum.

22. The decision of the Department in all matters relating to these loans shall be final and conclusive.

December, 1912.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

SCHEME OF AGRICULTURAL EXPERIMENTS.

[The original Scheme of manurial and variety experiments was first put into operation in 1902. The object of the manurial experiments was to ascertain the most suitable combinations of manures for each of the principal farm crops. These experiments were continued until 1911. The superiority of the results from certain mixtures was so uniform throughout the period during which the scheme had then been in operation that further repetition of the tests was not considered necessary after that year. In 1908 a second series of manurial experiments was introduced with a view to determining, in the case of the manures which had given the best results in previous years, what were the most advantageous proportions in which the several ingredients should be mixed. Details of this series of tests, including some additions made in 1911, are given in Division A of the following Scheme. Slight changes in the variety experiments have been made from time to time, those varieties which had been sufficiently tested being omitted and new varieties being added when necessary.]

The experiments in the feeding of Live Stock, which are detailed in Division, B of this Scheme, were introduced in 1911.]

Before commencing field experiments and demonstrations each year each Agricultural Instructor must submit to the County Committee and the Department his plans for the work, showing the number and variety of the experiments and demonstrations which he proposes to conduct and the estimated cost in detail of the seeds, manures and necessities required.

When his proposals have been approved by the County Committee and the Department, the Instructor should, on behalf of the Committee, order the seeds and manures in the requisite quantities. The Instructor must not, of course, obtain goods for which the Committee are liable for payment without authorisation from the Committee to do so. He should take every precaution to ensure that the seeds and manures are of the kinds specified in the scheme, and that the prices charged are not in excess of current market rates. The merchants' accounts are to be carefully examined by him, and he is required to certify as to their accuracy before they are presented to the County Committee for payment. Returns in connection with the experiments of each class (manurial, variety, etc.), on the several crops dealt with should be furnished to the Department on the forms supplied for the purpose immediately after the necessary weighings, etc., have been completed on all the plots of any one class from which reliable results can be obtained. Particulars of all experiments of the same class should be furnished together on one appropriate form, and the averages, etc., indicated on the form fully worked out.

The Instructor should submit to the County Committee, as soon as possible after the completion of his experimental work each season, a report on the results obtained during the season, so that if the Committee desire to publish the report, they may obtain the approval of the Department and have the report circulated among farmers prior to the commencement of the following season's field operations.

The experiments are intended as object lessons to farmers in the cultivation, manuring and seeding of land, and should be labelled so that an ordinary observer may be able easily to ascertain what they are intended to show. One label will suffice for each demonstration plot, but in the case of an experiment which includes several plots, a larger label stating the general character of the experiment should be erected in addition to the smaller labels, giving particulars with respect to each of the plots included in the experiments. The labels should be capable of resisting the weather.

No change must be made in any of the manurial experiments as given below, but the Instructor may include such additional plots as local conditions render advisable. In the variety tests, Instructors are required to include all the varieties specified in each list.

A.—SCHEME OF THE FIELD EXPERIMENTS.

I.—OAT CROP (Manurial Test).

Size of plots, one-tenth of a statute acre.

The following kinds and quantities (per statute acre) of manures to be applied :—

No. of Plot.	No. of Plot.
1. No manure.	{ 1 cwt. Sulphate of Ammonia.
{ 1 cwt. Sulphate of Ammonia	5. { 3 cwt. Superphosphate.
2. { 2 cwt. Superphosphate.	{ 3 cwt. Kainit.
{ 2 cwt. Kainit.	{ 1 cwt. Sulphate of Ammonia.
{ 1 cwt. Sulphate of Ammonia.	6. { 3 cwt. Superphosphate.
3. { 3 cwt. Superphosphate.	{ 4 cwt. Kainit.
{ 2 cwt. Kainit.	7. { 5 cwt. of mixture of artificials
{ 1 cwt. Sulphate of Ammonia.	{ applied to Plot 5.
4. { 4 cwt. Superphosphate.	
{ 3 cwt. Kainit.	

II.—OAT CROP (Variety Test).

Size of plots not less than one-eighth or more than a quarter of a statute acre.

The following varieties to be tested :—

No. of Plot.	No. of Plot.
1. Potato.	5. Yelder.
2. Black Tartarian.	6. Banner.
3. Abundance.	7. Any other varieties.
4. Waverley.	

III.—BARLEY CROP (Variety Test).

Size of plots, not less than one-eighth or more than a quarter of a statute acre.

The following varieties to be tested :—

No. of Plot.	No. of Plot.
1. Archer.	3. Any other Varieties.
2. Goldthorpe.	

IV.—WHEAT CROP (Variety Test).

Size of plots, not less than one-eighth or more than a quarter of a statute acre.

The following varieties to be tested :—

No. of Plot.	No. of Plot.
1. Red Fife.	4. White Queen.
2. Red Chaff White.	5. Any other varieties (preferably
3. White Stand-up.	include Square-head Master)

V.—TURNIP CROP (Manurial Test with Farmyard Manure).

Size of plots, one-twentieth of a statute acre.

The following kinds and quantities (per statute acre) of manures to be applied :—

No. of Plot.	No. of Plot.
1. 15 tons farmyard manure.	5. { 15 tons farmyard manure.
2. { 15 tons farmyard manure.	{ 4 cwt. Basic Slag.
{ 4 cwt. Superphosphate.	{ 15 tons farmyard manure.
3. { 15 tons farmyard manure.	6. { 5 cwt. Basic Slag.
{ 5 cwt. Superphosphate.	{ 15 tons farmyard manure.
4. { 15 tons farmyard manure.	7. { 6 cwt. Basic Slag.
{ 6 cwt. Superphosphate.	

[117]

VI.—TURNIP CROP (Manurial Test without Farmyard Manure).
Size of plots, one-twentieth of a statute acre.

The following kinds and quantities (per statute acre) of manures to be applied:—

No. or Plot.	No. of Plot.
1. { 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit. 5 cwt. Superphosphate.	4. { 4 cwt. Basic Slag. 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit. 5 cwt. Basic Slag.
2. { 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit. 6 cwt. Superphosphate.	5. { 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit. 6 cwt. Basic Slag.
3. { 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit.	6. { 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit. 6 cwt. of mixture of artificials applied to Plot 1.

VII.—TURNIP CROP (Variety Test).

Size of plots, each four ridges full length of field.

The following varieties to be tested:—

SWEDES.

No. or Plot.	No. or Plot.
1. Improved Purple Top.	5. Elephant.
2. Best of All.	6. Incomparable Green Top (Gordon).
3. Magnum Bonum.	7. Any other varieties.
4. Triumph.	

YELLOW TURNIPS.

8. Centenary.	10. Any other varieties.
9. Aberdeen Green Top.	

VIII.—MANGEL CROP (Manurial Test).

Size of plots, one-twentieth of a statute acre.

The following kinds and quantities (per statute acre) of manures to be applied:—

No. or Plot.	No. or Plot.
1. 20 tons farmyard manure.	6. { 20 tons farmyard manure. 4 cwt. Superphosphate. 3 cwt. Sulphate of Ammonia. 4 cwt. Salt.
2. { 30 tons farmyard manure. 3 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia. 4 cwt. Salt.	7. { 20 tons farmyard manure. 4 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia. 2 cwt. Salt.
3. { 20 tons farmyard manure. 4 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia. 4 cwt. Salt.	8. { 20 tons farmyard manure. 4 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia. 6 cwt. Salt.
4. { 20 tons farmyard manure. 5 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia. 4 cwt. Salt.	9. { 20 tons farmyard manure. 7½ cwt. of mixture of artificials applied to Plot 3.
5. { 20 tons farmyard manure. 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 4 cwt. Salt.	

IX.—MANGEL CROP (Variety Test).

Size of plots, each four ridges full length of field.

The following varieties to be tested:—

No. or Plot.	No. or Plot.
1. Yellow Globe.	4. Long Red.
2. Prize Winner.	5. Any other varieties.
3. Golden Tankard.	

X.—POTATO CROP (Manurial Test).

Size of plots, one-twentieth of a statute acre.

The following kinds and quantities (per statute acre) of manure to be applied:—

No. of Plot.	No. of Plot.
1. 15 tons farmyard manure.	6. { 15 tons farmyard manure.
2. { 15 tons farmyard manure.	7. { 4 cwt. Superphosphate.
3. { 3 cwt. Superphosphate.	8. { 2 cwt. Sulphate of Ammonia.
4. { 1 cwt. Sulphate of Ammonia.	9. { 1 cwt. Muriate of Potash.
5. { 1 cwt. Muriate of Potash.	10. { 15 tons farmyard manure.
	11. { 4 cwt. Superphosphate.
	12. { 1 cwt. Sulphate of Ammonia.
	13. { 1½ cwt. Muriate of Potash.
	14. { 15 tons farmyard manure.
	15. { 4 cwt. Superphosphate.
	16. { 1 cwt. Sulphate of Ammonia.
	17. { 2 cwt. Muriate of Potash.
	18. { 15 tons farmyard manure.
	19. { 4½ cwt. of mixture of arti-
	20. { scials applied to Plot 3.

XI.—POTATO CROP (Variety Test).

Size of plots, one-twentieth of a statute acre.

The following varieties to be tested:—

Mancrop.	Mid-Season.
No. of Plot.	No. of Plot.
1. Up-to-Date.	8. British Queen.
2. Duchess of Cornwall.	9. Abundance.
3. Summit.	10. Any other varieties.
4. Irish Queen.	
5. Shamrock.	
6. Old Champion.	
7. Any other Varieties.	

XII.—POTATO CROP (Boxing Test).

Size of plots, one-twentieth of a statute acre.

No. of Plot.

1. "Seed" boxed before December 1st.
2. Unsprouted Seed.

XIII.—POTATO CROP (Spraying Test).

Size of plots, one-tenth of a statute acre.

The following to be compared:—

(120 gallons of mixture to be applied per statute acre at each spraying.)

No. of Plot.

1. Unsprayed.
2. Effect of a 1 per cent. lime or Bordeaux mixture, double application.
3. Effect of a 2 per cent. lime or Bordeaux mixture, single application.
4. Effect of a 2 per cent. lime or Bordeaux mixture, double application.
5. Effect of a 1 per cent. soda or Burgundy mixture, double application.
6. Effect of a 2 per cent. soda or Burgundy mixture, single application.
7. Effect of a 2 per cent. soda or Burgundy mixture, double application.

[119]

XIV.—DESTRUCTION OF CHARLOCK (PRESHHAUGH) AND OTHER WEEDS (Spraying Test).

Size of plots, one-tenth of a statute acre.

The following solutions will be tested :—

No. of Plot.

1. Unsprayed.
2. 50 gallons 3 per cent. Sulphate of Copper.
3. 80 gallons 3 per cent. Sulphate of Copper.

XV.—MEADOW HAY CROP (Manurial Test for one year)

Size of plots, one-twentieth of a statute acre.

The following kinds and quantities (per statute acre) of manures to be applied :—

No. of Plot.

No. of Plot.

- | | |
|-----------------------------|--------------------------------------|
| 1. No manure. | 5. { 1 cwt. Nitrate of Soda. |
| 2. 10 tons Farmyard Manure. | { 2 cwt. Superphosphate. |
| 3. 1 cwt. Nitrate of Soda. | { 2 cwt. Kainit. |
| { 1 cwt. Nitrate of Soda. | { 1 cwt. Nitrate of Soda. |
| 4. { 2 cwt. Superphosphate | 6. { 2 cwt. Basic Slag (high grade). |
| | { 2 cwt. Kainit. |

The Basic Slag to be applied in February at the same time as the Kainit and Superphosphate are being applied to the different plots in the experiment.

XVI.—IMPROVEMENT OF SECOND CLASS PASTURE.

Improvement to be estimated by Observation.

Size of plots, one-quarter of a statute acre.

The following kinds and quantities (per statute acre) of manures to be applied :—

No. of Plot.

No. of Plot.

- | | |
|--------------------------------------|---------------------------------------|
| 1. 5 cwt. Basic Slag (high grade). | 4. { 10 cwt. Basic Slag (high grade). |
| 2. { 5 cwt. Basic Slag (high grade). | { 2 cwt. Kainit. |
| { 2 cwt. Kainit. | 5. 5 cwt. Potassic Superphosphate |
| 3. 10 cwt. Basic Slag (high grade). | 6. 10 cwt. Potassic Superphosphate |

XVII.—INFLUENCE OF SEED MIXTURES IN FORMING PASTURE.

Land selected to be left in grass for not less than two years.

Size of plots, not less than one-tenth or more than one-fourth of a statute acre.

The following mixtures to be tested :—

Plot 1.

- 1 bushel Italian Rye Grass (22 lb. per bushel).
- $\frac{1}{2}$ bushel Perennial Rye Grass (22 lb. per bushel).
- 4 lb. Red Clover.
- 2 lb. White Clover.

Plot 2.

- 1 bushel Perennial Rye Grass (22 lb. per bushel).
- $\frac{1}{2}$ bushel Italian Rye Grass (22 lb. per bushel).
- 4 lb. Red Clover.
- 2 lb. White Clover.

Plot 3.

- 18 lb. Perennial Rye Grass.
 9 lb. Italian Rye Grass.
 3 lb. Timothy.
 3 lb. Cocksfoot.
 4 lb. Broad Red Clover.
 2 lb. Alsike Clover.
 1 lb. White Clover.

Plot 4.

- 15 lb. Perennial Rye Grass.
 7 lb. Italian Rye Grass.
 4 lb. Meadow Fescue.
 3 lb. Timothy.
 3 lb. Cocksfoot.
 4 lb. Broad Red Clover.
 2 lb. Alsike Clover.
 2 lb. White Clover.

Plot 5.

At the discretion of the Instructors the following mixture (Elliot's) may be tested, but only on poor thin land :—

	Quantity of Seed per acre. lb.
Cocksfoot	10
Meadow Fescue	5
Tall Fescue	4
Tall Oat-like Grass	3
Hard Fescue	1
Rough-stalked Meadow Grass	$\frac{1}{2}$
Smooth-stalked Meadow Grass	1
Golden Oat Grass	$\frac{1}{2}$
Italian Rye Grass	3
White Clover	2
Alsike Clover	1
Late-flowering Red Clover	2
Kidney Vetch	$2\frac{1}{2}$
Chicory	3
Burnot	8
Sheep's Parsley	1
Yarrow	$\frac{1}{2}$

48

XVIII.—LIQUID MANURE EXPERIMENTS.

(a) On First Crop Hay or Old Meadow, preferably the former.

Size of Plots, one-sixteenth of a statute acre (for small farms each plot may be one-fortieth of a statute acre).

The following kinds and quantities (per statute acre) of manures to be applied :—

No. of Plot.

1. No manure.
2. 16 tons Farmyard Manure, applied before 15th February.
3. 16 tons Liquid Manure, applied one-half in February and one-half in April.
4. { 1 cwt. Nitrate of Soda, applied during last half of March.
 { 2 cwt. Superphosphate }
 { 2 cwt. Kainit. } applied before 15th February.

[121]

(b) On Cabbages.

No. or Floor.

1. No Manure—size of plot, 1 square perch.
2. 20 tons Farmyard Manure—size of plot, 4 square perches.
3. 20 tons Liquid Manure—size of plot, 4 square perches.

B.—SCHEME OF EXPERIMENTS IN THE FEEDING OF LIVE STOCK.

In carrying out experiments with Live Stock many unexpected difficulties will be met with by instructors. They are, accordingly, advised to undertake only a few experiments of this nature until they have gained experience of the work.

Selection of Farm.

In selecting farmers with whom to locate experiments in the feeding of Live Stock only those should be considered who have been in the habit of feeding pigs, in the case of experiments with pigs, and cattle in the case of experiments with cattle. Experiments should be undertaken only where full facilities for weighing the animals exist on the farm or in its neighbourhood.

Marking.

All the animals in the experiments should be properly marked for identification, and it is suggested that this could best be done by ear marks, i.e., by cutting notches out. A simple and cheap instrument would then suffice for marking all kinds of stock.

Records.

The hand or other person who is responsible for attending to the feeding operations should keep notes of matters affecting the progress of the experiment, e.g., periods when animals did not fully consume their rations, etc.

Valuing.

Notes should be made by the Instructor of the appearance and value of the animals in the different lots at the beginning and end of the experiment.

Excluding Animals from the Experiment.

If for any reason, such as sickness, accident, or death, any animal is removed from the experiment, the feed for the lot affected should be proportionately reduced, and in preparing the report no animal should be included which has failed to complete the experiment.

Weighting of Animals.

The animals are to be weighed at the beginning and at the end of every experiment. It is most important that the weightings should in each case be made under similar conditions, i.e., if at the beginning of the experiment the animals are weighed in the morning after feeding they should be weighed at the same time and under the same conditions at the end of the experiment.

In the case of Experiment V., Fattening of Cattle in Stalls, the animals should not be weighed immediately they are tied up off the grass. Before the commencement of the experiment both lots of cattle should be fed alike for at least one week after they are tied up, and they should be weighed at the end of that period.

With regard to pigs, no difficulty will be experienced in weighing the animals at the beginning of the experiment. Where, however, it is not possible to obtain the live weight of the different pigs, at the end of the experiment these should be calculated, allowing 25 per cent. for loss in killing, and the individual weights so arrived at should be included in the figures submitted to the Department.

Subsidy.

To compensate farmers for the trouble involved in carrying out experiments, a subsidy may be given, subject to the concurrence of the County Committee, calculated on the basis of a certain sum in respect of each animal fed. The maximum amount which may be granted in the case of each class of experiment is given below, but Instructors will, no doubt, be able to arrange in many cases for the carrying out of the experiments at a cost much below the maximum allowable. In addition a small sum may be given as a gratuity to the farm-hand who is in charge of the immediate work of the experiment. The Instructor should impress on the experimenters that payment of the subsidy will depend on his instructions being satisfactorily carried out. Before any experiment is begun, the Instructor should, of course, obtain the County Committee's and the Department's approval of his proposals for same, which should be submitted in detail.

Further particulars in regard to each class of experiment are given hereunder:—

FIGS.

I.—EXPERIMENT TO ASCERTAIN THE VALUE OF POTATOES FOR PIG FEEDING.*Details of Experiment I.*

Lot 1. Potatoes, Indian meal and pollard.

Lot 2. Indian meal and pollard.

It is desirable that the quantity of potatoes fed to Lot 1 should not be less than 4 lbs. per head per day at the commencement of the experiment, and not more than 10 lbs. per head per day during the concluding period.

Both Lots are to receive the same mixture of meal, and it is suggested that equal parts of Indian meal and pollard be used at the commencement of the experiment. Separated milk or buttermilk may be given provided both Lots are treated alike in this respect. Potatoes must be the only varying factor in this experiment. In the case of Lot 2, one additional lb. of the meal mixture is to be given for each 4 lbs. of potatoes fed to Lot 1.

II.—EXPERIMENT TO COMPARE THE VALUE OF BARLEY WITH MAIZE FOR PIG FEEDING.*Details of Experiment II.*

Lot 1. Potatoes and barley meal.

Lot 2. Potatoes and Indian meal.

Separated milk or buttermilk may be given provided both lots are treated alike in this respect.

Each lot of pigs may be given as much meal as they will consume, but other factors must be constant.

In both the above experiments not less than three animals are to be included in each lot. The maximum number of animals in each lot must depend on the funds at the disposal of the Instructor.

Subsidy for Pig Feeding Experiments I. and II.

The maximum subsidy payable is 10s. per pig (in addition to the allowance for the farm-hand, which must not exceed 10s. for an entire experiment.) The total grant in respect of each experiment must not exceed 25 10s. Pigs should not be less than 10 weeks or more than 14 weeks old at the commencement of the experiment. If possible, pigs between the ages of 12 and 14 weeks should be selected.

[128]

CATTLE.

III.—EXPERIMENT ON FEEDING CALVES.

Details of Experiment III.

Lot 1. Calf meal recommended by Department in leaflet No. 54, viz. :—

2	parts by weight of oatmeal.
2	do. maize meal.
1	do. pure ground flax seed.

Lot 2. Same as for Lot 1, except that wheatmeal should be substituted for oatmeal in the mixture.

A small allowance of linseed cake is to be given to the calves in both lots.

Calves should not be less than four weeks or more than eight weeks old at the commencement of an experiment. The average age of both lots of calves should be as nearly uniform as possible.

The minimum number of calves in each lot is to be three.

The maximum number must depend on the funds of the Instructor's disposal.

The period of experimental feeding should be sixteen weeks.

Subsidy for Experiment III.

The maximum subsidy payable is 10s. per calf (in addition to the allowance for the farm-hand, which must not exceed 10s. for an entire experiment.) The total grant in respect of each experiment must not exceed £5 10s.

IV.—EXPERIMENT ON THE FATTENING OF CATTLE ON GRASS

Details of Experiment IV.

Experiment with home-grown v. imported feeding stuffs.

Lot 1. Lot 1. Home-grown foods, viz., mixture composed of :—

2	parts wheat meal.
3	parts barley meal.
4	parts ground oats.

Lot 2. Imported foods, viz., mixture composed of :—

2	parts undecorticated cotton cake.
1	part Indian meal.

The quantity of mixtures fed is to commence at 3 lb. per head daily and increase to 5 lb. per head daily.

Experiment should start in May and continue for ten or twelve weeks.

The lots are to be fed in two fields and interchanged fortnightly or weekly.

The minimum number of cattle in each lot is to be four.

The maximum number must depend on the funds at the Instructor's disposal.

Subsidy for Experiment IV.

The maximum subsidy payable is 10s. per head (in addition to the allowance for the farm-hand, which must not exceed 10s.). The total grant in respect of each experiment must not exceed £6 10s.

V.—EXPERIMENT ON THE FATTENING OF CATTLE IN STALLS.

Details of Experiment V.

Lot 1. Home-grown foods, viz., mixture composed of :—

2	parts of wheat meal.
3	parts of barley meal.
4	parts ground oats.

Lot 2. Imported foods, viz., mixture composed of:—

- 1 part decorticated cotton cake.
2 parts Indian meal.

Linseed cake is to replace part of the mixture of concentrated foods supplied to Lot 2 in the last stage of fattening.

All animals are to get roots and fodder in addition. The quantity of mixtures fed is to commence at 3 lb. and to increase to a maximum of 8 or 10 lb. per head daily.

The minimum number of cattle in each lot is to be four.

The maximum number of animals in each lot must depend on the funds at the Instructor's disposal.

The period during which the experimental feeding is to continue must not be less than ten weeks.

Subsidy for Experiment V.

The maximum subsidy payable is £1 per head (in addition to the allowance for the farm-hand, which must not exceed 10s.). The total grant in respect of each experiment must not exceed £10 10s.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

NEW SCHEME OF FIELD MANURIAL EXPERIMENTS.

Experiments I. to V. inclusive are to be conducted on peat soils only. In each case a sample of the soil is to be taken before the plots are laid down, and submitted for analysis to permit of the percentage of lime and organic matter being determined.

Experiment VI. is to be conducted in seaboard localities only.

I.—OATS.

Size of plot, one-tenth statute acre.

The following kinds and quantities of manures will be used per statute acre:—

No. of Plot.	No. of Plot.
1. No Manure.	
2. { 1 cwt. Sulphate of Ammonia. 3 cwt. Superphosphate. 3 cwt. Kainit.	4. { 3 cwt. Superphosphate. 3 cwt. Kainit. 1 cwt. Sulphate of Ammonia.
3. { 1 cwt. Sulphate of Ammonia. 3 cwt. Superphosphate. 3 cwt. Kainit.	5. { 3 cwt. Slag. 3 cwt. Kainit.

II.—TURNIPS.

Size of plot, one-twentieth statute acre.

The following kinds and quantities of manures will be used per statute acre:—

No. of Plot.	No. of Plot.
1. 15 tons Farmyard Manure.	{ 15 tons Farmyard Manure.
2. { 15 tons Farmyard Manure. 4 cwt. Superphosphate.	5. { 4 cwt. Slag. 2 cwt. Kainit.
3. { 15 tons Farmyard Manure. 4 cwt. Slag.	6. { 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit.
4. { 15 tons Farmyard Manure. 4 cwt. Superphosphate. 2 cwt. Kainit.	7. { 4 cwt. Slag. 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit.

[125]

III.—MANURES.

Size of plot, one-twentieth statute acre.

The following kinds and quantities of manures will be used per statute acre :—

No. of Plot.		No. of Plot.	
1.	20 tons Farmyard Manure.	4.	20 tons Farmyard Manure.
2.	20 tons Farmyard Manure.	5.	4 cwt. Superphosphate.
	4 cwt. Superphosphate.		4 cwt. Kainit.
	2 cwt. Sulphate of Ammonia.		20 tons Farmyard Manure.
	4 cwt. Kainit.		4 cwt. Superphosphate.
3.	20 tons Farmyard Manure.		2 cwt. Sulphate of Ammonia.
	4 cwt. Superphosphate.		4 cwt. Salt.
	1 cwt. Sulphate of Ammonia.		
	4 cwt. Kainit.		

All manures to be applied before seed is sown.

IV.—POTATOES.

Size of plot, one-twentieth statute acre.

The following kinds and quantities of manures will be used per statute acre :—

No. of Plot.		No. of Plot.	
1.	15 tons Farmyard Manure.	5.	15 tons Farmyard Manure.
2.	15 tons Farmyard Manure.		1 cwt. Sulphate of Ammonia.
	1 cwt. Sulphate of Ammonia.		4 cwt. Superphosphate.
	4 cwt. Superphosphate.		1½ cwt. Muriate of Potash.
	1 cwt. Muriate of Potash.		15 tons Farmyard Manure.
3.	15 tons Farmyard Manure.	6.	1 cwt. Sulphate of Ammonia.
	½ cwt. Sulphate of Ammonia.		4 cwt. Superphosphate.
	4 cwt. Superphosphate.		2 cwt. Muriate of Potash.
	1 cwt. Muriate of Potash.		15 tons Farmyard Manure.
4.	15 tons Farmyard Manure.	7.	1 cwt. Sulphate of Ammonia.
	4 cwt. Superphosphate.		4 cwt. Slag.
	1 cwt. Muriate of Potash.		1 cwt. Muriate of Potash.
	(1½ cwt. Sulphate of Ammonia.		
	8. ½ cwt. Superphosphate.		
	(1½ cwt. Muriate of Potash.		

V.—MEADOW HAY EXPERIMENT.

Size of plot, one-twentieth statute acre.

The following kinds and quantities of manures will be used per statute acre :—

No. of Plot.		No. of Plot.	
1.	No Manure.		
	(1 cwt. Nitrate of Soda.		(1 cwt. Nitrate of Soda.
2.	2 cwt. Superphosphate.	3.	2 cwt. Slag.
	2 cwt. Kainit.		2 cwt. Kainit.
	½ cwt. Nitrate of Soda.		
4.	4 cwt. Slag.		
	2 cwt. Kainit.		

VI.—POTATOES.

MANUREAL TEST WITH SEAWEED FOR SEABOARD LOCALITIES.

Plot, one-twentieth statute acre.

The following kinds and quantities of manures will be used per statute acre :—

No. of Plot.		No. of Plot.	
1.	15 tons Farmyard Manure.	4.	15 tons Seaweed.
2.	15 tons Seaweed.		4 cwt. Superphosphate.
	15 tons Seaweed.		1 cwt. Muriate of Potash.
	1 cwt. Sulphate of Ammonia.		15 tons Seaweed.
3.	4 cwt. Superphosphate.	5.	1 cwt. Sulphate of Ammonia.
	1 cwt. Muriate of Potash.		4 cwt. Superphosphate.

No. of Plot.

6. { 15 tons Seaweed.
 { 4 cwt. Superphosphate.

Class of Seaweed used should be noted, and also whether used fresh or dried.

VII.—ROTATION EXPERIMENT WITH LIME.

Size of plot, half statute acre.

To be applied to stubble after lea cuts.

Plot 1, No Lime.

Plot 2, Slaked lime (slaked with water and applied in form of powder)
 2 tons per statute acre.

Plot 3, Ground burnt lime. Quantity used to cost same amount as lime used on Plot 2.

Plot 4, Ground limestone. Quantity used to cost same amount as lime used on Plot 2.

The quantities of ground lime and ground limestone to be used on Plots 3 and 4 respectively are to be calculated upon the cost of the material at the works in each case; the cost at the kiln of the lime for Plot 2 being taken as a basis.

Results to be submitted each year for four years following application.

No. 28273-11.

Revised.

DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

EGG-LAYING COMPETITION, 1912-1913.

The Department have decided to conduct a laying competition for a limited number of pullets, hatched during the year 1912, bred by poultry keepers in Ireland. The competition, which will be held at the MEASURED INSTITUTE, CO. MEATH, will extend over a period of eleven months from 1st OCTOBER, 1912, to 31st AUGUST, 1913, inclusive.

The object of this laying competition is to stimulate and encourage poultry keepers to pay more attention to the selection, for breeding purposes, of hens with a high laying record, as well as to find out where the best strains of laying birds are procurable in Ireland.

The competition will be arranged so as to ascertain

1. The number of eggs laid by each bird.
2. The average weight of eggs of different breeds.
3. The market value of eggs laid per pen per month.

Prizes will be awarded as follows:—

1. For the pen laying greatest number of eggs.
2. For the pen laying the greatest weight of eggs.
3. For the pen laying eggs of the highest market value.

For 1, 2, and 3, the prizes will be of the following value:—

1st prize	£3.
2nd "	£2.
3rd "	£1.

Special Prizes:—

1. For the pullet of the non-sitting breeds laying the greatest number of eggs during the competition.
2. For the pullet of the sitting breed laying the greatest number of eggs during the competition.
3. For the pen laying the greatest number of eggs from 1st October to 31st January.

Special Prize, £1 in each case.

Certificates :—

A First Class certificate will be awarded for any pen laying an average of 200 eggs or over.

A Second Class certificate will be awarded for any pen laying an average of 160 eggs.

CONDITIONS OF THE COMPETITION.

1. The competition will be confined to birds of the breeds recognised under the Department's Poultry Scheme, 1911-12, viz. :—Black Minorca, Brown Leghorn, White Leghorn, Barred Plymouth Rock, Buff Orpington, White Orpington, White Wyandotte, Salmon Faverolles, Sussex, Rhode Island Red.

2. Each pen will consist of six pullets hatched after 1st January, 1912. No male birds will be allowed.

3. A separate house and run will be provided for each pen, and one trap nest for every two birds.

4. A fee of 10s. 9d. must be lodged in respect of each pen entered for competition. All such fees will be returned to persons whose entries are not accepted by the Department. In the case of pens accepted for the competition, the entry fee will be refunded to each competitor whose birds lay an average of 140 eggs each.

5. An intending competitor may send in more than one entry, but in the event of entries being received from more than forty persons, one pen only will be allotted to an individual competitor.

If there are more than forty competitors, the Department will make a selection so as to have each county represented as far as possible.

6. Entries will close on Thursday, 21st August, 1912. As soon as possible after 21st August next the Department will notify intending competitors whether their entries have been accepted or not, and will send to each selected competitor an addressed label, with pen number thereon, to be attached securely to the hamper, etc., in which the birds are forwarded. Special rings will also be supplied to each competitor for the birds, and no other ring will be accepted. Birds wearing rings other than Conference rings will be rejected and returned, carriage forward, at owner's risk.

All birds must arrive at the Munster Institute, Cork, by Friday, 15th September, 1912.

7. Carriage on birds to and from the competition must be paid by competitors.

8. All birds will be examined on arrival at the place of competition. The Department reserve the right to return birds showing signs of disease, or which they consider otherwise unsuitable.

Whilst every possible care will be taken, the Department will not be responsible for any loss or injury to birds arising out of or during the competition.

9. Any hen showing symptoms of disease will be at once removed, and the owner given the option of replacing it. Similarly, if a hen dies, the owner may replace it.

10. All birds in the competition will be fed alike; no patent foods or spices will be used.

11. All eggs laid will be sold; the amount realised will be applied towards defraying the cost of competition.

12. In the event of the eggs from any pen during the first three months of the competition weighing on an average less than 1½ oz. each the birds will not be eligible for the award of prizes or certificates, but they will be allowed to complete the test.

13. The competition will be in charge of the Poultry teacher at the Munster Institute, who will have no knowledge of the ownership of the birds, each pen being known by number only.

14. Competitors will not be permitted to visit the competition or to communicate with the Poultry Manager in charge. The non-observance of this condition will entail the disqualification of the competitor's pen or pens.

15. Entries should be submitted on the accompanying form, which should be carefully filled in and forwarded, together with entrance fees, to

THE SECRETARY,
DEPARTMENT OF AGRICULTURE
AND TECHNICAL INSTRUCTION,
4 UPPER MERRION STREET,
DUBLIN.

to whom all communications in connection with the competition should be addressed.

July, 1912.

DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN,
2nd June, 1913.

No. A. 11263-13.

Sir,

I have to refer to the Department's letter (No. A. 5010-12) of 23rd December, 1912, on the subject of the American Gooseberry Mildew and Black Currant Mite (Ireland) Order of 1912, and to transmit herewith a certificate (Form A. 263) of the appointment of the Itinerant Instructor in Horticulture for the County as an authorised Officer for the purposes of that Order.

I have at the same time to request that you will be good enough to furnish the Instructor with the Certificate in question, and to remind him that as the season is at hand during which American Gooseberry Mildew is most noticeable, the Department will now expect him to give special attention to ascertaining and reporting upon any cases of this disease in the County. Cases of Black Currant Mite should similarly be reported upon whenever observed. The Instructor should, if he has not already done so, make himself fully acquainted with the provisions of the Order, a copy of which is enclosed.

A Notice issued under Article 5 of the Order now in force may require the burning not only of diseased bushes, but of all or any bushes on infected premises. The Order of 1908 provided for the destruction of those bushes only which were actually diseased at the time the Notice was served. Experience, however, has shown that bushes apparently healthy at the time the Notice is issued are likely subsequently to develop the disease if they have been growing in close proximity to the infected bushes. If these apparently healthy bushes were burned at the time those obviously infected were destroyed, the proprietor and the Instructor would be saved the trouble incidental to repeating, possibly more than once, the process of burning bushes, spraying the sites, or taking the other precautionary measures prescribed, and in addition the risk of a further outbreak of the disease would be greatly reduced. Accordingly, in future, Notices may require the destruction not only of obviously diseased bushes, but also of any bushes which, although apparently healthy, may be considered, taking all the circumstances of the case into account, as infected with the disease by reason of their close proximity to diseased bushes. The Instructor, accordingly, should report whether there are any bushes (other than those actually showing the symptoms of the disease) which in his opinion should be destroyed in each case, and he should include in his report full particulars of the facts on which he bases his opinion.

[129]

The undermentioned documents are enclosed for the information and use of the Instructor:

1. Memorandum for the guidance of authorized officers under the American Gooseberry Mildew (Ireland) Order of 1912.
2. List of cases of Gooseberry Mildew or Black Currant Mite reported in previous years, which should be again visited and reported upon during the present season.
3. Copies of Form A. 262 and Form A. 321.

I am,

Sir,

Your obedient Servant,

T. P. GALT,

Secretary.

The Secretary,
each County Committee of Agriculture.

ORDER

OF THE DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

Dated the 28th day of November, 1912.

AMERICAN GOOSEBERRY MILDEW AND BLACK CURRANT MITE (IRELAND) ORDER, 1912.

The Department of Agriculture and Technical Instruction for Ireland, by virtue and in exercise of the powers vested in them under the Destructive Insects and Pests Acts, 1877 and 1907, do order, and it is hereby ordered, as follows:—

APPLICATION OF THE ORDER.

1. This Order shall apply to the whole of Ireland.

REVOCATION.

2. The American Gooseberry Mildew and Black Currant Mite (Ireland) Order, 1908, is hereby revoked as from the date of this Order.

DEFINITIONS.

3. In this Order:—

"The Department" means the Department of Agriculture and Technical Instruction for Ireland.

"Inspector" means an Inspector of the Department.

"Disease" means the disease affecting gooseberry and currant bushes which is known as *Sphaerotheca mors-uvæ*, or American Gooseberry Mildew; and in the case of currants the disease known as *Eriophyes Ribis*, otherwise *Phytophthora Ribis*, Big Bud, or Black Currant Mite.

"Diseased" means affected in any way with disease.

"Bush" means a gooseberry or currant bush, and includes a cutting, stock, seedling, or any part of a bush except the fruit.

"Landing" includes introduction through the post.

"Authorized" means authorized by the Department.

"Approved" means approved by the Department.

"Fruit" means gooseberries or currants.

"Article" means Article of this Order.

NOTIFICATION OF DISEASE.

4. The occupier of any land or premises on which there is a bush which is or appears to be diseased shall forthwith notify the fact in writing to

the Department either directly or through the Clerk of the Borough Council or Urban District Council as the case may be or where the land or premises are situated in a rural district through the Secretary of the County Committee of Agriculture for the county or the County Instructor in Horticulture employed by that Committee. Where practicable a specimen showing the disease or suspected disease shall accompany the notice. When the notification has been made to the Clerk or Secretary or County Instructor as aforesaid it shall be the duty of such Clerk or Secretary or County Instructor to communicate the fact forthwith to the Department.

MEASURES FOR THE PREVENTION OF THE SPREAD OF DISEASE.

5. (1) On receiving in any manner notification of the existence or supposed existence of disease an Inspector or other authorised person shall take such steps as may be necessary to determine whether the disease exists and the area covered by diseased bushes or by bushes to which the disease is likely to spread and shall cause notice to be served on the occupier of any land or premises within that area requiring him to adopt such measures for the prevention of the spread of disease as are authorised by this Order.

(2) The notice under this article may require the adoption of any one or more of the following measures:—

(i.) The destruction on the infected premises of the fruit (if any) of diseased bushes or the disposal of such fruit in a manner which will eliminate all danger of the spread of disease therefrom.

(ii.) The immediate destruction by burning or other effective method of all or any bushes on the premises, including the fruit on such bushes, and of all packing material, packages, and boxes at any time used for the storing or conveying of such bushes and fruit or the thorough spraying with an approved fungicide, or the close pruning and collection and burning of all prunings with subsequent spraying.

(iii.) The pruning of the bushes in such manner as may be directed by an Inspector or other authorised person and to his satisfaction.

(iv.) The thorough spraying of the bushes with an approved fungicide or the close pruning and collection and burning on the infected premises of all prunings with subsequent spraying of the bushes.

(v.) The thorough spraying as soon as possible with an approved fungicide of the site of any bush that has been destroyed or of any place in which diseased bushes or fruit have been temporarily deposited.

(vi.) The thorough spraying with an approved fungicide of all bushes on the area defined in the notice at such time or times as an Inspector or other authorised person shall direct and to his satisfaction.

(vii.) That no bush shall be removed or be permitted to be removed out of the area defined in the notice except with and subject to the conditions (if any) of a licence signed by an Inspector or other authorised person authorising such removal, but this restriction shall not apply to the fruit of a bush that is not diseased.

(3) Every such notice shall remain in force until altered or withdrawn by an Inspector or other authorised person.

IMPORTATION OF BUSHES.

6. It shall not be lawful to land in Ireland any bush brought from any place out of Ireland without a licence from the Department, and no such licence shall be given except for the importation of bushes to be used for the purpose of experiment or propagating new varieties, provided that in the case of a person or firm having a nursery in Ireland the Department at their discretion may grant to such person or firm a licence for the importation of a limited number of bushes solely for the purpose of propagating new stocks in such nursery, but not for resale. The licence must be produced if required by any officer of Customs, or other authorised person, when the bush is landed.

[131]

POWERS OF ENTRY.

7. An Inspector or other authorised person may enter on any land or premises :—

(1) On which he has reason to suspect that disease exists or has recently existed, and examine any bush or fruit on such land or premises ;

(2) On which he has reason to believe there are bushes landed in contravention of this Order, and examine any bush on such land or premises ;

(3) On which gooseberries are stored or are kept or are exposed for sale, and may direct that any diseased fruit shall be so disposed of as to eliminate all danger of the spread of the disease therefrom. He may also require that the packages in which the diseased fruit has been found or conveyed shall be immediately disinfected or burnt.

PENALTIES.

8. Every person shall be liable on conviction to a penalty not exceeding Ten Pounds who

(i.) fails to give the notification of disease as required by Article 4 ; or
(ii.) fails to comply with any direction contained in a notice served on him under this Order ; or,

(iii.) fails duly to destroy any bush, fruit, packing material, package, box, or other thing when required by a notice served on him under this Order ; or,

(iv.) knowingly or without reasonable excuse sells or exposes for sale or has in his possession for the purpose of selling or exposing for sale any bush or the fruit of any gooseberry bush diseased or suspected of being diseased ; or,

(v.) wilfully obstructs or impedes an Inspector or other authorised person in the course of his duties under this Order ; or,

(vi.) fails to give information when required to do so as to the place of origin of any bush or fruit ; or,

(vii.) lands or attempts to land in Ireland any bush brought from any place out of Ireland without a licence from the Department.

(viii.) without the written consent of the Department sells or exposes for sale or plants in Ireland any bush which has been landed in contravention of this Order knowing the same to have been so landed.

EXECUTION OF THE ORDER.

9. For the purposes of this Order a notice shall be deemed to have been served on a person if it is delivered to him personally, or left for him at his last known place of abode or business, or sent through the post in a letter addressed to him there, and a notice or other document, purporting to be signed by an Inspector or other authorised person, shall be *prima facie* evidence that it was signed by him and duly authorised by the Department.

COMMENCEMENT.

10. This Order shall come into operation on the 28th day of November, 1912.

SHORT TITLE.

11. This Order may be cited as "The American Gooseberry Mildew and Black Current Mite (Ireland) Order, 1912."

IN WITNESS WHEREOF the Department of Agriculture and Technical Instruction for Ireland have hereunto set their official Seal this twenty-eighth day of November, 1912.

T. P. GILL,
Secretary.

(L.S.)

MARKETING OF EGGS.

As nearly all the eggs exported from Ireland are sent to Great Britain, it is to the interest of Irish producers and shippers of eggs that they should be marketed in such condition and style as will secure for them the highest prices in British markets.

The Department have issued a "Memorandum to Producers," dealing with objectionable practices, and advising as to the adoption of those methods of treating eggs which will ensure their being brought to market clean and in good condition. They have also issued a memorandum on the "Purchase of Eggs by Weight," illustrating the advantages which would accrue both to the producer and to the Irish buyer by the adoption of the system of purchase by weight. Copies of these publications can be obtained from the Department.

The chief causes for complaint by British Buyers concerning Irish eggs are :—

1. Want of cleanliness.
2. Staleness.
3. Mustiness.
4. Breakages during transit.

It lies with the buyers of eggs to remedy the first fault named, by differentiating in price between clean and dirty eggs; and the second, by testing the eggs by means of a light, especially when the price of eggs is rising and by refusing to buy stale eggs. They should urge producers to carry out the recommendations contained in the "Memorandum to Producers" above referred to.

The third objectionable condition, "mustiness," is undoubtedly due sometimes to exposure of the packed cases to wet during transit, but is more often caused by the use of damp packing material, or of cases made of unseasoned wood, by packing in the open in wet weather, by the use of cases damped by exposure to rain before being used, or by neglect to protect the cases from rain when cutting them in wet weather. As mustiness is a common cause of complaint, shippers of eggs should adopt every precaution to prevent its occurrence.

The question of breakages, and claims arising therefrom, is one which has caused, and is causing, much trouble, vexation, and loss to consignees, consignors, and carriers. The Department have given very earnest attention to this matter for some time, and through their officers have obtained detailed reports with respect to the condition on arrival of a large number of cases of different types which were forwarded from various Irish stations to a number of towns in England and Scotland. The experience thus gained indicates that breakages during transit may generally be attributed to :—

- (a) The use of cases which are unsuitable, or badly constructed.
- (b) Bad packing.
- (c) Rough handling.

While there is no doubt that many Irish egg shippers, including some of the largest firms in the trade, use excellent cases and pack in thoroughly good style, there are also many of whom the opposite may be stated, such faults as the following being common, viz., insufficiency of packing material, the use of cases made of wood of insufficient thickness, of insufficient capacity for their contents, of bad construction, and with too wide spaces between boards, whereby pilferage is facilitated.

It appeared to the Department that many of the evils above referred to would be greatly minimised, and that it would be beneficial to all the interests concerned, if standard packages could be adopted for the Irish egg trade. They, therefore, invited the representatives of many of the

[188]

leading firms of Irish shippers and case makers, and of the Railway Companies concerned in the Irish trade, to confer with them on this important matter. As a result of these conferences, the Department feel justified in recommending for adoption by Irish shippers of eggs, standard egg cases, the specifications of which are set out in the appendix to this memorandum, and it is hoped that these will meet with the approval of the trade and will be generally adopted.

It will be observed that so many as ten distinct cases have been approved. This appeared to be necessary in order to provide two sizes of the larger flat type, and also to provide both for hand and for tray packing. Every effort has been made to avoid unnecessary cost, and, at the same time, provide for sufficient strength and packing capacity.

The trial shipments of egg cases, referred to above, indicated that if eggs are carefully packed in the standard packages herein recommended, subject to the prescribed conditions, the breakages should not exceed 2 per 120; that the flat 6 hhd. cases, Nos. 7 (A and B), are those in which breakages of eggs are likely to be greatest, and that the cases in which least breakage occurred, and which are strongly recommended for adoption by Irish shippers, are the 12 hhd. cases, Nos. 1 and 2; the divisible 6 hhd. cases, Nos. 5 and 6; and the 3 hhd. cases, Nos. 9 and 10.

It is generally admitted by the trade that Irish eggs, if marketed fresh and clean and well packed, are at least equal to any others and superior to most; it, therefore, rests largely with Irish producers and shippers to ensure that Irish eggs shall attain that superiority which they should possess.

The points to which special attention should be directed are the following:—

- Producers to provide clean, fresh eggs, as advised in the "Memorandum to Producers";
 - Buyers to buy by weight, as advised in the Memorandum, "Purchase of Eggs by Weight";
 - Eggs to be tested by light test on rising markets. Stale eggs to be refused; dirty eggs to be bought at reduced prices;
 - The "holding over" of eggs by producers or buyers to cease;
 - Eggs to be packed in clean, dry, well made standard cases;
 - Eggs to be graded to fixed weights per 120, so that no egg in any package shall vary appreciably in size from the average egg of that package;
 - The top layer of eggs in a case to be fairly representative of all eggs in the case as to size and colour;
 - Hand or tray packing is strongly recommended;
 - Absolutely dry oat straw, or non-odorous wood wool, to be used for packing;
 - Packing cases and straw or wood wool to be kept dry and under cover until required for use;
 - Packing to be done under cover. This is at all times preferable, but in wet weather it is essential;
 - Suitable waterproof covers to be provided for protecting empty or full cases when they are moved by road in wet or showery weather;
 - Cases containing 6 hhd. eggs or upwards to be lifted by two people when moved on or off vehicles, or into or out of wagons, etc.
- (Here followed detailed specifications for ten different cases).

A.B. Memo. No. 12.

MEMORANDUM TO IRISH POULTRY KEEPERS ON MARKETING EGGS.

Nearly all the eggs exported from Ireland are sent to Great Britain. Other egg producing countries are continually striving to get a larger share of the trade in eggs to that market.

The quality of Irish eggs, when at their best, is admitted to be as good as that of any and better than that of most eggs imported into Great Britain.

Dirty Eggs.—The foreign producer, by supplying clean eggs, has raised the standard of cleanliness of eggs demanded by the British public; hence, cleaner eggs are required by, and must be supplied to the trade in Great Britain if the best prices are to be obtained.

Stale Eggs.—Foreign competition is most keenly felt when the home supply of eggs is falling off, and prices are rising. If Irish eggs are held over at this period, it is certain the foreign eggs will be taken in preference; hence, producers should never hold over eggs, as the practice of doing so is one of the most certain ways of causing Irish eggs to lose their position on British markets, and, therefore, to depreciate in value.

Irish poultry keepers should pay the strictest attention to the following recommendations:—

1. *Clean Nests.*—Provide clean and dry hay, straw, bracken, or other suitable material for the nests, renew the material frequently, and always whenever it becomes wet or soiled.

2. *Collection of Eggs.*—Eggs should be collected twice daily, shortly before noon, and at dusk; if one collection only is possible, it should be made at dusk. It is especially advisable when hens are broody (chucking) to collect twice daily. On no account should eggs which have been found by chance in nests in the open, during harvest, or at other times, be mixed with those intended for market; any such eggs which are fit for consumption should be used at home.

3. *Removal of Dirt.*—Any dirt which is on the egg when it is collected should be at once removed by means of a dry cloth; or if that method fails, a slightly dampened, but not wet cloth may be used. Do not wash hen eggs nor put them in water, nor use any chemical to remove dirt.

4. *Where to Keep Eggs.*—Keep eggs in a cool, dry, place that is free from objectionable odours.

5. *Eggs to Sell.*—Reserve small eggs for home consumption, and market the large and coloured eggs.

6. *Packing for Market.*—Put clean, dry hay or straw in the basket or box used for taking eggs to market; never use green grass for this purpose. Eggs should always be kept dry. Contact with wet material, or exposure to moisture or rain, causes them to go bad quickly; therefore, eggs when taken to market should be protected from wet by a suitable rainproof covering.

7. *Preserved Eggs.*—Preserved eggs must not be sold as fresh eggs: it is fraudulent to do so.

8. *Holding Over.*—Eggs should be marketed regularly, at least once a week, and oftener if circumstances permit.

9. *Selling by Weight.*—Producers should, where possible, sell hen eggs to traders who buy by weight, viz., at per lb. weight of eggs, instead of to those who buy by count, viz., at per dozen, score, or 120. Selling by weight ensures that the producer shall get full value for large eggs. The British buyer generally buys eggs graded to weight, and pays the best price for the larger sizes.

The producer must bear in mind that, although the position which Irish eggs hold in British markets has greatly improved in recent years, and that the value of eggs imported by Great Britain from Ireland is greater than that of its egg imports from any other country, this position is mainly due to the good quality of the best Irish eggs, and to recent improvements

affected in production, pecking, grading and handling. It must also be remembered that the countries competing with Ireland in the egg market are continuously improving their methods of production and handling, that competition with these other sources of supply becomes keener year by year, and that it is only by promptly remedying ascertained faulty methods that Ireland can hope to maintain its present position. It is certain that in Great Britain there is a steadily increasing demand for the best Irish eggs, fresh, clean, and well handled. The supply of such eggs is far from equal to the demand, and the demand for clean, fresh eggs cannot be supplied by stale, dirty and badly-handled eggs. Furthermore, the Irish poultry keeper cannot hope to improve his position materially until Irish eggs are brought to market fresh and clean.

Copies of this memorandum will be supplied to egg buyers for distribution, free of charge, and post free, on application to the Secretary, Department of Agriculture and Technical Instruction for Ireland, Upper Merrion Street, Dublin. Letters of application so addressed need not be stamped.

A B. Memo. No. 13.

PURCHASE OF HEN EGGS BY WEIGHT.

New laid eggs, weighing preferably not less than 16 lbs. per hhd., are always in great demand on British markets, and good prices can undoubtedly be obtained for eggs of this description provided they are graded to stated weights per hhd.

It should be the aim of Irish producers to supply eggs weighing not less than 15 and preferably 16 lbs. per hhd. to meet this demand; but, owing to the practice prevalent throughout Ireland of buying eggs by count, producers are inclined to reserve large eggs for home consumption and to market the small ones, since, under this system, small eggs bring in as good a return as large ones. Another fault of this system is that the buyer who purchases by count must frequently, if not always, pay too much for small eggs, and too little for large ones.

Owing to the difficulty experienced by Irish shippers in obtaining eggs averaging 15½ lbs. per hhd. all round, and on account of the large number of small-sized eggs bought, it is a common practice to mix in one case eggs of 16 lbs. per hhd. and upwards with those of 14 lbs. per hhd. and under in order to produce an average weight of 15 or 15½ lbs. per hhd. Such loose grading is strongly objected to by British buyers, and is detrimental to the interests of Irish shippers and producers.

It is suggested that buyers should give careful consideration to this question and especially that they should take some of their own transactions, work them out on the basis of purchase by weight, and note results.

If the system of purchasing eggs by weight were generally adopted there would be a direct inducement to producers to reserve small eggs for home consumption and to market the larger ones, and, by careful selection of the poultry, to gradually increase the average size of eggs produced. This has been the result in those districts where the purchase of eggs by weight has been steadily carried on for some years.

For the purpose of purchasing by weight, it is generally found convenient to use a spring balance weighing machine, fitted with a large dial indicating weights up to about 80 lbs., and supplied with two pans or trays for holding eggs that are being weighed.

TECHNICAL INSTRUCTION.

PROGRAMME OF EXPERIMENTAL SCIENCE, DRAWING, MANUAL INSTRUCTION, AND DOMESTIC ECONOMY FOR DAY SECONDARY SCHOOLS.

I. SUBJECTS.

1. **EXPERIMENTAL SCIENCE** shall mean such a system of instruction in Physical and Natural Science as will involve the greater part of the work being done by the pupils themselves in an approved laboratory.
2. **DRAWING** shall mean a system of instruction in Free and Mechanical Drawing, Design and Modelling.
3. **MANUAL INSTRUCTION** shall include instruction in the use of tools employed in Wood or Metal-working, and drawing in connection therewith.
4. **DOMESTIC ECONOMY** shall include instruction in Cookery and House-keeping, and may include Laundry-work or any other form of practical instruction in household management of which the Department may approve.

II. COURSES OF INSTRUCTION.

5. The Courses of Instruction include :—

- (a) A **PRELIMINARY (TWO YEAR) COURSE**, which is obligatory on all pupils and on all schools claiming grants under these regulations.
- (b) **SPECIAL COURSES**, and
- (c) **AUXILIARY COURSES**.

6. THE **PRELIMINARY (TWO YEAR) COURSE** may vary according to the character of the school; but it shall include Experimental Science and Drawing. Not less than three hours per week shall be devoted to Experimental Science, and not less than one hour per week to Drawing.

In schools claiming grants for more than six hours' instruction in the Preliminary Course in any week, Manual Instruction or Domestic Economy must form part of the Preliminary Course; and, in such cases, at least one hour and a-half per week must be devoted to instruction in one of those subjects.*

In Schools also which do not provide instruction in one of the Special Courses, or whose Special Course has not been recognized by the Department for attendance grants, Manual Instruction or Domestic Economy, with Experimental Science and Drawing, shall constitute the Preliminary Course; and in order that the Preliminary Course in such schools may be recognized, the time-table must show that at least six hours' instruction per week is devoted to instruction in those three subjects.

7. The following are the **SPECIAL COURSES**. Grants shall not be payable on any one pupil in respect of more than three of these Courses :—

- (1) **Physics**: Third Year—General Physics, Heat, and (optional) Electricity and Magnetism; fourth year—(a) Wave Motion, Sound and Light and Radiant Heat, or (b) Electricity and Magnetism. (Either or both fourth year syllabuses may be taken. In the latter case grants would be payable on any one pupil in respect of only one other course.)
- (2) **Chemistry**: Third year—Inorganic Chemistry; fourth year—Inorganic Chemistry, with some Elementary Organic Chemistry.
- (3) **Mechanics**: Third year syllabus; fourth year syllabus.

* Attendance at Special Inspections may be claimed on, in addition to the hours set apart in the general time-table.

[187]

- (4) Botany : Third year syllabus ; fourth year syllabus.
- (5) Physiology and Hygiene : Third year syllabus ; fourth year syllabus.
- (6) Physical and Commercial Geography : Third year syllabus ; fourth year syllabus.
- (7) Domestic Economy (Special Course) : Third year syllabus ; fourth year syllabus.
- (8) Drawing : Third year syllabus ; fourth year syllabus.

Managers desiring to have the Special Courses of their schools recognised will be required to show that a fair proportion of the pupils who have worked through the Preliminary Course are in attendance at the Special Courses ; that not less than three hours per week are devoted to instruction in each Special Course ; and that at least one-third of the time is assigned to theoretical instruction.

Not more than six hours per week may be considered when computing the total number of hours of attendance at any one Special Course.*

8. THE AUXILIARY COURSES include Manual Instruction and Domestic Economy, which may be taken in any year, and may be taken in addition to the three Special Courses permitted under the foregoing paragraph. Domestic Economy may not be taken as a Special Course and also as an Auxiliary Course by the same pupil in the same year.

9. The subjects of the Preliminary, Special and Auxiliary Courses shall be followed in the order prescribed in the Department's published Syllabuses, and pupils may not be admitted to any course who have not worked satisfactorily through the preceding, or equivalent courses. Students, however, who have worked through the Third Year Syllabus of Physics may proceed directly to the Fourth Year Syllabus of Mechanics, and those who have worked through the Third Year Syllabus of Mechanics may proceed directly to the Fourth Year Syllabus (Course B) of Physics.

III. GRANTS.

10. Grants in respect of courses of instruction in Experimental Science, Drawing, Manual Instruction, and Domestic Economy, may be made in accordance with the following regulations, to Day Secondary Schools in which the Department are satisfied that sufficient provision is made for the instruction of the pupils in the other main branches of a general education :—

11. Grants shall be payable in respect of attendances made by those students only who are over twelve and under eighteen years of age on the 1st day of June in the calendar year in which the course is entered upon, and who have completed an education which would entitle them to be placed in the Sixth Class of a school under the Board of National Education in Ireland.

12. Grants shall be payable in respect of attendances made by the pupils of these schools only which have been approved by the Department.

13. Grants on the attendance of duly qualified pupils will be made for each hour of instruction per week throughout the school year, according to the following scale :—

EXPERIMENTAL SCIENCE.—10s. for the first year of the course ; 12s. 6d. for the second year of the course ; 15s. for the third year of the course ; and 20s. for the fourth year of the course.

DOMESTIC ECONOMY (as a Special Course).—8s. for the third or fourth year of the course.

DRAWING.—6s. for the first year of the course ; 6s. for the second year of the course ; 7s. for the third or fourth year of the course.

MANUAL INSTRUCTION AND DOMESTIC ECONOMY (Auxiliary Courses).—6s. for the first year of the course ; 7s. for the second year of the course ; 8s. for the third or fourth year of the course.

* Attendances at Special Inspections may be claimed on, in addition to the hours set apart in the general time-table.

14. The numbers on which grants for each subject are to be calculated, at the foregoing rates, shall be determined by adding together the total number of hours of attendance made by all the pupils in that subject (at the approved time-table hours), and dividing by forty, the normal school year being regarded as of forty weeks.

15. The syllabuses of instruction, "first year," "second year," etc., correspond with the "first year," "second year," etc., rates of payment.

16. Grants may be paid in respect of the attendances of any one pupil for not more than two years in any Syllabus. Payments will not be made in respect of any one pupil for more than five years in all. It is not obligatory that the claims should be made in consecutive academic years.

17. The grant to be made in respect of any subject of any year in accordance with the foregoing regulations, may, in exceptional cases, be increased by one-tenth when the Inspector of the Department is of opinion that the work is of conspicuous merit. It may also be reduced by one or more tenths for defects of equipment, or of organisation, or of instruction, or for any other cause which may tend to lessen the efficiency of the work done.

IV. CONDITIONS OF GRANTS.

18. The courses of instruction should begin in August or September of any year and must be continuous throughout the school year. The hours per week devoted to the course must be fairly distributed throughout the week: in exceptional circumstances, where previous application has been made, the Department may sanction another arrangement. Deviations from the approved time-table, unless previously sanctioned, will be regarded as a serious irregularity.

19. Claims for attendance grants may be preferred on behalf of those students only who have punctually and regularly attended instruction in all the obligatory subjects of the Preliminary, or of a Special, course. Grants shall only be payable in respect of the attendance of students at Auxiliary Courses when each attendance has been regular and punctual.

20. Claims for attendance grants may be preferred on behalf of those students only who have been registered as in attendance at instruction in each of the subjects of the course on or before the 1st day of November in any academic year.

21. Grants shall not be payable in respect of the attendances of pupils of any school which, after working for one academic year in accordance with the Department's regulations, has not the two years' Preliminary Course in operation.

22. Grants shall not be payable in respect of attendances at Manual Instruction or Domestic Economy (Auxiliary Courses) in any year, except in the case of pupils who have attended instruction in the Preliminary Course of Experimental Science and Drawing or in one of the subjects of a Special Course, in that year, in accordance with the Regulations.

[Regulation 23 cancelled.]

24. Grants will be made only upon a satisfactory report by an Inspector of the Department. The Inspector will satisfy himself not only that the attendances on which the claim is based have actually been made, but also that the instruction is of a class superior to that given in Elementary Schools.

25. Grants shall not be payable in respect of pupils who are reported by the Department's Inspectors as unfit to attend the Courses in which they have been receiving instruction.

26. Pupils on the roll of a National School are not eligible for attendance grants.

V. REGISTRATION.

27. Attendance registers will be supplied by the Department upon receipt of the form of application for recognition of the classes (Form S. 44) ;

attendances not registered in the manner indicated on the official registers or registered before the receipt of Form S. 44, will be disregarded. A class may not be said to have begun until attendances are so registered.

VI. LABORATORIES.

28. Grants will not be made for instruction unless due provision is made for experimental work in Science, on the part of the pupils, in properly equipped and approved laboratories.

VII. DURATION OF LESSONS.

29. Practical Instruction in Science, Manual Instruction and Domestic Economy, must be given in lessons of at least eighty minutes' duration.

30. Lessons of less than forty minutes' duration will not be considered in computing the "total number of hours of attendance."

31. The minimum time per week recognised for grants on behalf of attendance at Manual Instruction or Domestic Economy is one hour and a half.

32. The time table of the school must be arranged so as to leave sufficient time to the teacher for preparation of laboratory work.

VIII. SIZE OF CLASSES.

33. Not more than forty pupils shall be taken at a time by one teacher for Theoretical Instruction, nor more than twenty for Practical Instruction in any one subject, unless an assistant recognised by the Department is provided. In that case the number for Practical Instruction may be increased to thirty. Instruction in Drawing may, for this purpose, be regarded as theoretical instruction.

34. Where classes for practical instruction are small, concurrent instruction in two Syllabuses may be exceptionally allowed, but the approval of the Department must be obtained in each case.

35. Concurrent instruction in the first and second year syllabuses of the Preliminary Course in Drawing will be allowed under one teacher where the number of pupils under instruction does not exceed thirty.

IX. GENERAL CONDITIONS.

36. The qualifications of the teachers and assistant teachers, and the time-table of the school, must be approved by the Department.

37. It shall be a condition of grants being made, that, except in the case of teachers who give their services gratuitously, a fixed salary shall be paid to the teachers of the classes, either in respect of these classes or of their work in the school as a whole; that a reasonable sum of money shall be provided for the upkeep of the premises; and that the grants obtained shall be paid into the school account and be used for improving the efficiency of the school.

38. That portion of the Income of a school which is derived from grants in accordance with these regulations must be applied to such purposes as shall be approved by the Department. If at any time it appears that the application of the income is unsatisfactory, the assistance of the Department may be withdrawn. An account of the receipts and expenditure of each school in respect of these grants must be furnished if required by the Department.

39. The Department reserve, under these regulations, the right to withhold grants from any school conducted for private profit in which the fees are, in the Department's opinion, excessive, or which is situated in a locality already sufficiently supplied with public institutions.

40. The decision of the Department in regard to all questions arising in connection with the payment of grants under this programme must be regarded as final.

PROGRAMME FOR TECHNICAL SCHOOLS AND CLASSES.

I.

PREFATORY NOTE.

The following Regulations are designed to provide supplementary aid towards the instruction given in Technical Schools and Classes. They also apply to certain institutions, other than Day Secondary Schools, which, prior to the issue of these Regulations had received aid under the conditions of the Science and Art Directory of the Board of Education. The grants payable under these Regulations are from monies voted annually by Parliament, and supplement the aid provided from the Department's Endowment Fund and local rates.

It is recognised that the funds for Technical Instruction derived from the rates and from the Department's Endowment are inadequate to meet the demands upon them owing to the rapid development of the Department's work in Technical Schools. The grant towards schemes of Technical Instruction from the Department's Endowment is limited by the amount of that Endowment. The grants under these Regulations vary in accordance with the amount and value of the educational work done. The Regulations are intended to encourage the efficient organisation of courses of instruction and to extend facilities for providing efficient teaching in the subjects of the Programme.

The Schools and Classes working under Part II. (a) of this Programme are mainly, though not exclusively, Evening Schools. It may be useful to indicate the position which teaching in evening classes occupies in relation to other branches of education. It is clear that instruction in evening classes cannot form a substitute for the more general and systematic education given in Day Schools, whether Primary, Secondary, or Technical. The work of such evening schools and classes constitutes a specialised form of education, intended to fit those receiving it for industrial or commercial pursuits, or to render those already engaged in such pursuits more efficient in their work. Instructions of this nature in evening schools has obvious drawbacks. It possesses, however, certain well marked advantages. Attendance at such schools is purely voluntary. Those attending are for the most part engaged or about to be engaged in some form of industry—they have commenced the serious work of life—and are meeting problems and difficulties which the Evening Technical School can help them to solve. They perceive that the higher branches of their calling may be reached only by increased technical skill and knowledge. This being the case, the attitude of evening students to instruction is usually most favourable; but progress is hindered by several circumstances: the previous preparation of students joining evening Technical Schools is in many cases not such as to fit them for the specialised form of instruction which it is the special function of such schools to impart. An attempt is made in these Regulations to remedy this defect. Before a student can take full advantage of a specialised course of instruction in any branch of Science or Technology he should at least be able to express himself clearly, both orally and by means of writing and drawing; he should be able to make such elementary calculations as are required in all industries, and he should know something at least, and that something really and practically, of the fundamental principles of Science underlying all industrial work. Without this preparation a student cannot hope to profit by a specialised course. He will be continually handicapped and disheartened by the difficulties, and will tend to retard other members of the class who may be better prepared. When these conditions are not satisfied the young student should be given an opportunity to comply with them, and to this end should enter the Introductory Course.

[141]

A certain standard of elementary education is obviously necessary for such an Introductory Course as that set out in the Regulations. It will be necessary that schools should carefully refrain from registering, in the Introductory Course, students who have not attained this standard. If such students were admitted the bad effects would appear in the work of the specialised courses. The work of the Introductory Course is intended to provide the necessary preliminary instruction for those not already qualified, and suggested Syllabuses of English, Mathematics, and Domestic Economy suitable to the Courses are contained in Appendix B.

A second difficulty is the shortness of time available for instruction in Evening Classes. For students engaged in arduous work during the day the amount of time devoted to evening technical school work must be severely limited. Speaking generally, not more than two evening attendances a week can be expected, for homework is essential if full advantage is to be derived from the work in class. The hours of school study thus limited become precious, and the organisation of the school and the efforts of the teachers should be earnestly directed to the most thorough utilisation of these hours, and to this end every lesson should be carefully prepared. It will, moreover, be obvious that, under such circumstances, regular attendance becomes a matter of the highest importance. The Department mark their sense of the importance of this by the "Increment Grant" under which largely increased grants are paid for continued attendance over twenty hours, up to a limit of 120 hours.

Students who have satisfactorily passed through the Introductory Course, which may occupy one, or, at most, two years, or who have in some other manner reached a satisfactory standard of education, may be registered for attendance in a course of instruction designed to extend over three or four years. A wide freedom is allowed under the Programme in order to permit schools to frame courses in accordance with the needs of the locality and its industries. It thus becomes necessary on the part of Committees of Schools and their Principals to make themselves familiar with the local industrial conditions and needs, and to frame courses of instruction in accordance with those conditions. It seems necessary to remark that such courses should be carefully considered and drawn up some time in advance of the opening of a new session in order that the Department's approval may be obtained. The Department may refuse where this has not been done to make any payments in respect of such courses.

It is necessary to point out that it is not enough, in drafting a course of instruction in any branch of technical knowledge, to indicate a number of subjects, some of which may be taken at the option of the student. What is wanted is that a course of work should be designed and Syllabuses should be framed by the teacher to meet the needs of those for whom the course is intended. This may, and no doubt will, somewhat restrict the number of those who can be claimed upon as following the course, but it will greatly increase its value to the technical student. If the Syllabuses be carefully drawn up no course need consist of more than two or three subjects, and optional subjects would become the exception rather than the rule. Instead of offering a number of Subjects a school should offer a number of Courses, and no student should be allowed to omit subjects of fundamental importance. Where, however, a student on entering a school shows a competent knowledge of the earlier stages of a Course of Study he may be allowed to join the Second or Third Year Course.

The Department will expect that Courses submitted for approval shall be accompanied by Syllabuses drawn up with a view to local needs.

They will accept, where these are appropriate, the Syllabuses of the Board of Education, the City and Guilds of London Institute, the Royal Society of Arts, etc., but each subject in each year of a course of instruction should be represented by a definite Syllabus of work graded to suit the successive years of the course. The Syllabuses in each subject should be so drawn up as to enable them to be covered in one session. When this

has been carefully done the promotion of students will proceed automatically from year to year, and only in exceptional cases should it be necessary for a student to "repeat" the work of a year. Payments will not be made in respect of attendances at subjects lying outside the courses approved by the Department.

It will be obvious that the greatest importance attaches to the drawing up and organisation of these courses of instruction. In the first place it may be remarked that schools will be well advised to severely restrict the number of courses attempted.

While there are, no doubt, cases in which an exception may wisely be made, as a general rule students should only follow courses designed for the occupation they follow or intend to follow. The grant will vary according to the efficiency of the work of a school, and this in turn will in a large measure depend upon the manner in which the school is organised to meet local needs and to provide a suitable training for local industries. Every school will be expected to maintain a careful and systematic record of all its students in which particulars of the previous educational experience of each student, his age and occupation, the course, and subjects taken in successive years of attendance, are readily available, and, where possible, should also contain some information about the career of students subsequent to their leaving the School.

It will be observed that encouragement is afforded by the scheme for efforts to secure regular attendance, and attendance for several successive years. The increased grants for instruction in successive years also afford facilities for the employment of more highly trained teachers than would otherwise be possible, and the Department will expect that for such advanced instruction teachers of ability and experience will be employed. In courses in Applied Science, for example, efforts should be made to secure teachers having experience in the particular industry to which the course applies.

While the maintenance of courses of instruction such as have been indicated above should be aimed at in Technical Schools, there are many schools and classes where students cannot as yet be got to take courses. In rural districts especially, much excellent work is done by means of classes in Domestic Economy and Manual Work conducted by Itinerant Instructors. The Department desire to aid such classes as well as small permanent centres where the instruction is efficient. They are prepared, therefore, to make grants under Section II. (b) at a lower rate than those appropriate to courses of instruction as set out in Section II. (a). They desire, accordingly to draw the attention of Committees to the regulations for payment on single subjects of instruction set out under Section II. (b) of the Regulations.

II.

REGULATIONS FOR THE ADMINISTRATION AND DISTRIBUTION OF GRANTS TO SCHOOLS OTHER THAN DAY SECONDARY SCHOOLS.

I.—Conditions under which Schools and Classes may be recognised for Grants.

1. The school or class must be under the superintendence of a Committee appointed under Section 14 of the Agriculture and Technical Instruction (Ireland) Act, 1899, or other responsible body of managers, recognised by the Department, to whom grants will be paid.

2. Grants under these regulations will only be made in respect of schools or classes in Counties, County Boroughs or Urban Districts in which a rate for technical instruction is raised.

3. The premises in which classes are conducted, the accommodation and equipment, and the programme of instruction, must be approved by the Department.

4. The qualifications of teachers and assistant teachers and the timetable must be approved by the Department.

5. The managers of a school or class must make accurate returns of such particulars as are required by the Department and within the specified times.

6. The Department may from time to time require from the local Committee a report as to the provision made within their district, either by themselves or other managers, for instruction in the subjects of this programme, regard being had to the industries of the district, and the occupation of the inhabitants and may, upon consideration of this report, recognise or refuse to recognise any further classes which may be proposed.

7. The schools and classes shall be at all times open to the Department's inspectors, who will, from time to time, visit with or without notice, and report on the condition and suitability of the school buildings or classrooms; the character and quality of the instruction, and its suitability to the needs of the locality; the adequacy of the teaching staff for the number of students under instruction, the progress of the students, which they may ascertain in such a manner as they may consider necessary; the method of registration; and generally as to the organisation of the school work, and the carrying out of the scheme of instruction in accordance with the Department's Regulations.

II. (a).—*Technical Schools.*

8. The authorities of each school working under this section must provide a series of suggested courses of instruction, which have grown out of a study of local industrial conditions. These courses of instruction should be made up of allied subjects, should be designed to extend over three or four years, and should be progressive in character. In the case of small schools, however, two year courses may be accepted. In addition to those in schools admitting students who possess only the minimum requirements for admission to a Technical School, an Introductory Course should be provided.

9. The courses proposed by the authorities of each school must be submitted to the Department by the 1st June preceding the Session, and must be accompanied by Syllabuses (in duplicate) in cases where these have not already been approved. These proposals will require the written approval of the Department. A draft of a convenient form in which to draw up the courses is set out in Appendix E.

10. The instruction should be given in evening classes, but where the Department consider that local circumstances justify the establishment of day classes, such classes may be formed.

11. An evening class is one in which instruction begins at or after 4 p.m. throughout the week, or at or after 1 p.m. on Saturdays.

12. A day class is one in which instruction begins before 4 p.m. throughout the week, or before 1 p.m. on Saturdays.

(i.).—REGULATIONS APPLYING ESPECIALLY TO THE INTRODUCTORY COURSE.

13. Introductory course classes should be of such a nature as to fit students to take up a specialised course of technical instruction. These classes must be distinct from those organised under (ii.) below, and must be taught separately.

14. The subjects of instruction in respect of which payments are made under this division are:—

(a) English.

(b) Mathematics.

(c) One or more of the following:—

Experimental Science, Drawing, Manual Work in Wood or Metal, Domestic Economy.

15. Students on whom grants are claimed must have received such an education as would entitle them to be placed in the sixth class of a school under the National Board.

16. All students under instruction in the Introductory Course must attend instruction in each of the sections (a) (b) and (c) of paragraph 14 above.

17. Students registered in the Introductory Course will not be eligible for payments in a Specialised Course in the same session.

(B).—REGULATIONS APPLYING ESPECIALLY TO THE SPECIALISED COURSES.

18. A specialised course of instruction for any student on whom payment may be claimed shall consist of a scheme of study in two or more subjects of a course approved by the Department, and extending over three or more years.

In the first year of specialisation students must take up at least two and not more than three subjects, and in subsequent years not more than three subjects.

The Department will require, as a rule, that one main subject will be continued throughout each student's course of study. The instruction received in this main subject, as well as in other subjects approved as part of the course, will be eligible for grants at the rates appropriate to the year of specialisation of the student.

In courses for women, where a student adopts a course of study in which the main subject is a subject other than in Domestic Science, and which complies with the minimum requirements as to the number of subjects to be taken, the Department will allow grants in respect of instruction in Domestic Science, provided that not more than three subjects in all are taken in any year.

19. Students registered in this section must—

(a) have satisfactorily followed the Introductory Course, or

(b) have passed in the Junior Grade Examination of the Intermediate Education Board, or

(c) be certified by the Principal or responsible teacher to have reached an equivalent satisfactory standard of education.

20. In the case of students registered under 19 (c) the following particulars must be submitted in writing to the Department's Inspector for his approval:—

(i) any examinations passed which are regarded as equivalent to (b), or

(ii) the marks obtained at entrance examinations held in the Technical School. (The worked papers should be retained on the school premises); or,

(iii) any special reasons for admitting students to specialised courses.

21. For the purposes of grants the subjects which may be included in specialised courses of study, and on which payment may be made, are grouped as follows, but courses of study may be made up of subjects taken from different groups.

Group A.—Commercial Subjects (Section A.).

Group B.—(1) Commercial Subjects (Section B.).

(2) Languages.

(3) Mathematics.

Group C.—Science (Pure and Applied).

Group D.—(1) Handicrafts.

(2) Domestic Science.

Group E.—Art Subjects.

Group A.—Commercial Subjects (Section A.).

Commercial subjects which involve mostly mechanical operations, such as shorthand, book-keeping, and office routine, including copying, indexing, filing, correspondence, typewriting, and the mechanical operations concerned with postage, telegraph and banking.

[145]

Group B.—(1) *Commercial Subjects (Section B.)*

This group includes the study of subjects which require wider general knowledge and more intensive study than those in Group A., such as economics of industry and commerce, commercial law, accountancy, banking and currency, insurance, statistics, railway administration, and economic and commercial history and geography.

(2) *Languages.*

The teaching of languages in the evening is partly a subject of general culture; is required partly for commercial correspondence; and partly for those who have to deal with the mechanical operations of seeing books and other literature through the press. The group may include Irish, French, German, Spanish, Italian, or any other language (including history and literature) which a committee can show to be required by the circumstances of a locality.

(3) *Mathematics.*

Mathematical subjects, including the treatment of the subject in a practical way; such treatment, for example, as is usually given under the subject of mensuration or of practical plane and solid geometry.

Group C.—*Science (Pure and Applied).*

Under pure science will be included such subjects as mechanics, physics, chemistry, biology, botany, zoology, physiology.

Under applied science would be included naval architecture, navigation, nautical astronomy, building construction, machine construction and other subjects involving systematic instruction in the underlying scientific principles, and which would be classified under such headings as:—

- (1) Building industries.
- (2) Metal industries.
- (3) Textile industries.
- (4) Printing and process industries.
- (5) Furniture industries.
- (6) Leather industries.
- (7) Woodworking industries.
- (8) Carriage Building industries.
- (9) Electrical industries.
- (10) Chemical industries.
- (11) Agricultural industries.

At least half the instruction in subjects included in this group should be practical, and must be given under approved conditions of accommodation and equipment.

The practical work must be so arranged as to be illustrative of the principles taught, and should not be directed to developing dexterity in the practice of trade processes.

Group D.—*Handicraft and Domestic Science.*

- (1) Handicraft—manual instruction in wood and metal, wood-carving, (2) Household subjects, including cookery and hygiene, housewifery, laundry-work, dressmaking, millinery, needlework.

Group E.—*Art Subjects.*

Drawing (free and mechanical), design, painting, architecture, modelling and applied art, such as black and white illustration, goldsmiths', silver-smiths', and jewellers' work, stained glass work, mosaic, enamelling, and any other subject of applied art which a committee can show to be required by the circumstances of their locality.

The first year of a student's course in Art must include instruction in the two subjects—free and mechanical drawing.

(iii).—RATES OF GRANTS FOR EVENING CLASSES.

22. Grants will be made upon the total number of hours of attendance of fully qualified pupils, at the following rates per attendance-hour :—

Introductory Course, 2d.

Specialized Courses—

Year of Course,	Group A. Geographical Subjects. (Section A.)	Group B. (1) Commercial Subjects (2) Languages (3) Mathematics	Group D. Handicraft and Domestic Science.	Group C. Sciences (Pure and Applied).	Group E. Art Subjects
First Year	d. 2	d. 4	d. 4	d. 6	d. 4
Second Year	3	6	5	9	6
Third Year	4	9	6	12	9
Fourth and subsequent years	5	15	6	21	12

23. The rates of grants payable in respect of each group may in any school, upon account of conspicuous merit, be increased by one-tenth, or upon grounds of inefficiency, be decreased by one or more tenths, as the Department, in consideration of their Inspector's report, may determine.

24. An increment for continued attendance at instruction in the case of individual students will be paid on the total attendance-hours at all subjects of an approved course, in the introductory or in the specialized courses.

Rate of Increment for Continued Attendance.

For each hour from 21 to 40 hours,	1d. per hour.
" " 41 to 60 "	2d. "
" " 61 to 80 "	3d. "
" " 81 to 100 "	4d. "
" " 101 to 120 "	5d. "

No increment will be paid on attendance hours exceeding 120.

(iv).—RATES OF GRANTS FOR DAY CLASSES.

25. Grants to Day Classes will be made at half the above rates, and no increment on account of instruction given in these classes will be payable. Not more than 400 hours' attendance in all in any one session may be claimed upon in respect of any student attending a day class.

(v).—REGULATIONS FOR PAYMENT OF GRANTS.

(See also General Regulations, page [146].)

26. Each student must be registered as in attendance at instruction in his course on or before the 1st December in each session.

27. The total attendances of any student at any approved course of study must be fairly distributed over the subjects of the course.

28. A year's work will involve at least forty hours' instruction in the subject matter of any course of study, and students who have not satisfied this requirement may not be registered for attendance grants in a higher course.

29. Students will be eligible for grants in the same Syllabus in a subject for not more than two School Sessions. Grants will not, however, be paid

[147]

in respect of a second year's attendance in the same Syllabus should the student's attendance be claimed on generally at the rates appropriate to a higher year of specialisation.

30. Students will be eligible for grants for not more than two School Sessions at the rates for the introductory course, or for any one year of specialisation.

31. Students will, unless in exceptional circumstances, be required to pursue the course of study which they may adopt upon entering the school. In the case of students who may, with the approval of the Department, change their course, payments will be made at first year rates only in respect of the first year of specialisation in the new course, and a further change will not be approved until they have completed a satisfactory amount of instruction in that course.

32. The attendance of teachers at day classes may be paid upon at evening rates.

II. (b)—*Technical Classes.*

33. Grants at a lower rate than those set out in Section II. (a.) will be paid upon the attendance of pupils in any approved subject of instruction under the following conditions:—

34. The rates of payment will be:—

- | | |
|--|---------------|
| (1) For Literary or Commercial Subjects, | 2d. per hour. |
| (2) For Art, Handicraft and Domestic Science Subjects, | 3d. per hour. |
| (3) For Science (Pure and Applied) Subjects, | 4d. per hour. |

35. Grants under this section will not be paid in respect of more than one subject for each student.

36. Domestic Science and Agricultural Science, for the purpose of this regulation, will each be regarded as one subject.

37. Grants will not be paid under this Section on account of students registered under Section II. (a.).

38. The grant on account of any Class under this Section will, as a rule, be the normal grant calculated upon the basis set out above, but the grant for any subject may, on account of conspicuous merit, be increased by one-tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department may decide.

39. The arrangements regulating the admission of students must be such as to exclude from a class any student who from want of sufficient preliminary training, or other cause, is not qualified to take advantage of the instruction given in it. The grant may be withheld on account of any students whom the Inspector reports to be thus unqualified.

40. In schools where, in the opinion of the Department, on consideration of the reports of the Inspector, the circumstances are such as to permit of the organization of classes exclusively for students registered under this section, they will require that this shall be done.

41. The practical work of the students must not include a continued repetition of manipulative processes of which they have acquired a knowledge.

III.—*Teachers' Classes.*

42. Where special classes or courses are established at a Technical School or Central Institution (other than a Training College) for the instruction of teachers of Primary or Secondary Schools in the subjects of this programme, in accordance with a scheme approved by the Department, grants may be paid at the rate prescribed for the third year of specialisation under Section II., 32, of this programme.

43. Grants under this Section will not be paid in respect of more than fifteen teacher-students in any one class. For the purposes of this Regulation two or more classes meeting together under the same teacher shall be regarded as one class during the period of such concurrent instruction.

Payments may be made in respect of any teacher for any subject for not more than three years, and will be at the same rate for each year.

44. The amount of grant payable under these rates may in any school, upon grounds of conspicuous merit, be increased by one-tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department, in consideration of their Inspector's report, may determine.

45. No increment grants will be payable under this Section.

46. The instructors must be recognised by the Department as qualified for this special work.

47. Proposals for the conduct of classes under this Section must be specially submitted for approval, and should include particulars as to the number and status of the teachers for whom the class or course is organised, the proposed syllabus of instruction, and the special qualifications of the teacher.

48. Classes working under this Section will be required to submit to such examination as the Department may decide.

49. Grants will not be paid in respect of the attendance at these classes of students other than teachers actually engaged in Primary and Secondary Schools. Monitors and Pupil Teachers in National Schools, are not regarded as "teachers" for this purpose.

IV.—*Day Schools for Apprentices and others engaged in Business*

50. Day technical or commercial schools or classes, which are conducted by properly constituted managers, either in conjunction with works, business houses, or technical schools, with a view to improving the conditions of local industries and commerce, and to the further training of sub-managers, foremen, tradesmen or apprentices, may be admitted for grants under this section.

51. Such schools or classes must be open on one or more days of the week, not later than six o'clock in the evening, or than 1 p.m. on Saturdays.

52. Grants not exceeding three-fourths of the certified annual expenditure for the conduct of such schools or classes may be made by the Department in respect of students for whom an employer's certificate can be produced, showing that the students have been engaged during the session in a business, trade, or industry, or that they are indentured or properly engaged as apprentices to a firm or to an individual.

53. The expenditure must be set forth in properly audited accounts, to be accompanied by vouchers.

54. The decision of the Department as to what constitutes a legitimate charge against annual expenditure shall be final.

55. The accommodation provided, the courses of instruction, the syllabuses of the subjects taught, the qualifications of the teachers, the timetables of instruction and the estimate of expenditure, must be approved by the Department.

56. The practical work must be so arranged as to be illustrative of the principles taught, and should not be directed to developing dexterity in the practice of trade processes.

57. The amount of grants payable in respect of any school may, upon account of conspicuous merit, be increased by one-tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department in consideration of their Inspector's report, may determine.

V.—*Schools of Art.*

58. Schools of Art, which provide for students, the majority of whom are industrial, courses extending continuously over two or three years, according to a scheme approved by the Department, may be paid grants not exceeding three-fourths of the actual annual expenditure incurred in the conduct of such courses.

59. The expenditure must be set forth in properly audited accounts, to be accompanied by vouchers. An estimate of the expenditure must be submitted for the approval of the Department before the commencement of the session.

[149]

60. The decision of the Department as to what constitutes a legitimate charge against annual expenditure shall be final.

61. No grants will be payable to Schools of Art adopting this section of the regulations under the methods of payment set out in sections II. and III.

62. Recognition may be withheld or withdrawn from any School of Art in which, in the opinion of the Department, the efficiency of the instruction and the number of students in attendance do not justify the expenditure involved.

63. For the purposes of this section a School of Art must satisfy the following conditions:—

- (a) The rooms and equipment must be approved by the Department and must be wholly devoted to elementary and advanced instruction in art.
- (b) Provision must be made for drawing from life and modelling, and for instruction in ornamental and decorative art.
- (c) The Principal Teacher must hold an art master's certificate or an equivalent qualification.
- (d) Assistant Teachers must possess qualifications recognised by the Department (vide Appendix A).
- (e) Both day and evening classes must be held. The evening class must meet under the instruction of the Principal Teacher for two hours for at least three evenings per week, during forty weeks of the year, and the day class for the same period for at least three hours per day on two days of the week.

64. The amount of grants payable in respect of any school may, upon account of conspicuous merit, be increased by one tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department, in consideration of their Inspector's report, may determine.

VI.—Training Colleges.

65. Grants may be made for the instruction of students in training colleges in mathematics, experimental science, and drawing.

66. The rates per attendance-hour at which grants will be paid are as follows:—

	First Year. d.	Second Year. d.
Mathematics,	2	3
Experimental Science	3	4½
Drawing	2	3

67. No increments will be payable on such attendances.

68. Not more than 400 hours in all, nor more than 200 in any one of these subjects, may be allowed for purposes of grants in the case of any one student.

69. Grants in respect of any student may be claimed once only in the first year course, and once only in the second year course.

70. The rates per attendance hour may, upon account of exceptional merit, be increased by one tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department, on consideration of their Inspector's report, may determine.

71. Syllabuses of the courses of instruction must be submitted at the beginning of the session for the Department's approval.

VII.—General Regulations.

(Applicable to all Schools and Classes conducted under this Programme.)

72. Each school or class working under these regulations will be required to keep an admission register, which shall show for each student :—

- (1) full name and date of birth.
- (2) business, trade, or occupation,
- (3) School or college at which the student received his general education, and standard of education attained, with particulars of highest examinations passed.
- (4) qualifications to enter a technical school, or class.
- (5) classes attended each session in the school.

NOTE.—Suitably drafted admission forms may be made to fulfil the Department's requirements for an admission register. In larger schools it will be found more convenient to adopt the card-index system, the particulars required being transferred from the student's admission forms.

73. The registration of students must be conducted in accordance with the regulations set out on the official registers.

Attendance registers will be supplied by the Department upon receipt of the form of application for recognition of the classes; attendances not registered in the manner indicated on the official registers for the session will be disregarded. A class may not be said to have begun until attendances are so registered.

74. Lessons must be of one, one-and-a-half, two, two-and-a-half or three hours' duration. Laboratory or workshop practice, or practical instruction in Cookery, must be given in lessons of not less than one-and-a-half hours' duration.

75. Not more than forty students may be taken at a time by one teacher for theoretical instruction, nor more than twenty for practical instruction in any subject, unless an assistant, recognised by the Department, is provided, in which case the number may be increased to thirty. The special circumstances of large institutions will be exceptionally considered by the Department on written application.

76. Each class in any subject must receive at least twenty hours' instruction in the session.

77. Grants will not be paid for less than twenty hours' attendance in respect of any one student. In cases in which it is permissible or necessary for a student to take more than one subject, grants will not be paid on account of any subject in which less than ten hours' attendance is made.

78. Grants will not be paid on account of any attendances lost, or on account of any period during which the school is closed for epidemic illness, but where the Department are satisfied that any failure to comply with these regulations has been due to epidemic illness or other unavoidable cause, they may relax the regulations as far as may be necessary to meet the case.

79. If any of the conditions on which the grant is awarded are not fulfilled, the Department may withhold the grant, or, if they think fit, may pay the grant with or without deduction, warning the managers that a grant will not again be paid under similar circumstances.

80. Students may not be registered for grants under these regulations who are under fourteen years of age, and no student can be registered for grants under these regulations in respect of whom any grant is paid by the Department under any other regulations.

81. Scholars on the roll of a school (day or evening) under the Board of National Education may not be registered for grants under these regulations.

VIII.—Qualifications of Teachers.

82. The Department do not demand the same high qualifications from teachers in small schools as from teachers in the larger technical institutes, nor will they approve of the larger institutions, especially in the county boroughs, employing teachers who might for economic or other reasons have to be accepted as teachers in small schools. Each application will be dealt with on its merits, bearing in mind the special circumstances of each district, and the finances of the school. Some of the certificates which will be accepted for provisional recognition by the Department are, however, set out in Appendix A.

83. The final appointment of a teacher should not be made until his qualifications have been approved in writing by the Department.

84. A register is kept by the Department containing the names of teachers who, after provisional recognition by the Department in any subject, have taught a class in that subject to the satisfaction of the Department for at least one session.

IX.—(a) Local Science and Art Scholarships.

85. Where County Committees of Technical Instruction have established a system of Scholarships for boys on part of the approved scheme of technical instruction for the county, the Department may make a grant in aid of the Scholarship fund not exceeding half the value of the Scholarships awarded. This grant will not in the case of any county exceed £50 in any one year.

(b) Local Exhibitions.

86. Where Technical Instruction Committees establish, in connection with Technical Schools in County Boroughs or Urban Districts, for students of proved ability and ascertained need, and under the terms of a scheme approved by the Department, one or more Exhibitions, of the annual value of £50, tenable at the Royal College of Science, the Metropolitan School of Art, or other approved Technical, Commercial, or Art School, the Department may make a grant in aid of the Exhibitions awarded, not exceeding half their value, provided that the Department's total contribution in this respect does not exceed £50 in respect of any one Urban District, other than a County Borough, in any one year. Candidates for these Exhibitions must be eighteen years of age, they must have been in regular employment under normal conditions in a trade, business, or industry for at least a year; they must have been in attendance at a Technical School within the administrative area of the nominating Committee for at least two complete and consecutive sessions; and they must satisfy the Department that their general education is of such a nature as to enable them to take full advantage of the course of instruction selected at the approved day school of higher education.

87. In the case of Exhibitions whose admission to the Royal College of Science for Ireland, Dublin, or the Metropolitan School of Art, Dublin, has been sanctioned by the Department, the fees for tuition at those Institutions will be remitted. Where the Exhibition is held in a school, under the management of the Technical Instruction Committee by whom the Exhibition is established, the Department will require that the Committee shall remit the fees for tuition. In the case of all Exhibitions held at other approved Institutions, the Department will be prepared to pay half the fees for tuition in an approved course, provided that the Technical Instruction Committee, by whom the Exhibition is established, provide the other half from their funds. The Department's grant in such circumstances will not, however, exceed the sum of £10 in respect of any one exhibition.

88. Successful candidates must devote their whole time during the period for which the Exhibition is granted to the advancement of their studies. Committees proposing to establish Exhibitions must submit, for the Department's approval, a scheme for the award of Exhibitions.

88. The Department may refuse to aid any Exhibition if there is not a sufficient number of competitors, or if the selected candidate does not in their opinion, show sufficient merit to justify the award of an Exhibition.

X.—Certificate of Satisfactory Completion of Course.

90. A certificate may be issued to any student who has followed in a Technical School a sufficiently satisfactory course, extending over at least two years of specialisation, and an Honours certificate to any student who has followed an approved course extending over at least four years of specialisation. The certificate forms will be prepared and filled in locally, and signed by the chairman of Committee and Principal of the school. The Department will afterwards stamp them to give them authoritative recognition. The names of the subjects of the course in each year, the number of hours' instruction, and the number of years' attendance should be inscribed on the back of the certificate.

91. The Department may, as necessity arises, modify or add to this Programme; but no important changes will be made without due notice.

92. The decision of the Department in all questions arising in connection with the payment of grants under this Programme must be regarded as final.

APPENDIX A.

QUALIFICATIONS OF TEACHERS.

A register has been formed, containing the names of teachers who, after provisional recognition by the Department in any subject, have taught a class in that subject, to the satisfaction of the Department, for at least one session.

Provisional recognition will, as a rule, be accorded in respect of the following qualifications:—

- (1.) The Degree of any University, or the Diploma of an approved Day Technical University College, in respect of subjects taken at the final examination for the Degree or Diploma.
- (2.) First Class full Technological Certificates of the City and Guilds of London Institute.
- (3.) The Irish Secondary Teachers' Drawing Certificate in respect of elementary instruction in Art subjects, such, for example, as the teaching of Drawing to classes of the Introductory year.
- (4.) The Irish Secondary Teachers' Honours' Drawing Certificate in respect of the subjects named on the certificate. In county boroughs, and in the larger technical schools where circumstances appear to demand it, higher qualifications will be looked for.
- (5.) The Department's Diploma in respect of Domestic Economy subjects in the case of students trained at the Irish Training School of Domestic Economy.
- (6.) Diplomas in respect of Domestic Economy subjects awarded by the Board of Education, by the National Union, or by the late Kildare Street School of Cookery, now the Irish Training School of Domestic Economy.
- (7.) Certificates in respect of Manual Instruction issued by the Department at the close of courses of training of Manual Instructors conducted in Dublin.
- (8.) The Teachers' Certificates in Manual Training (Woodwork and Metalwork) of the City and Guilds of London Institute, and the Teachers' Higher Certificates (Woodwork and Metalwork) of the Board of Examinations for Educational Handwork.
- (9.) Certificates of Class I., Stage III., of the Royal Society of Arts.

[158]

(10.) Teachers' Diplomas of the London Chamber of Commerce in respect of commercial subjects and languages named thereon.

(11.) Pitman's Full Teacher's Certificate for Shorthand.

(12.) The Certificate of the National Board, in respect of English and Mathematics of the Introductory year.

First-class Certificates in the Lower Grade (or in Stage II.) of Science subjects of the Board of Education will not alone be recognised as a sufficient qualification to teach the subject named on the certificate.

For recognition as teacher of a modern language, high attainments, and some conversational ability, will be looked for.

Specially qualified persons will always be exceptionally recognised but such recognition will be granted only when the applicant for recognition has satisfied the Department that he is specially qualified. Applications for special recognition should be accompanied by a complete detailed statement of the applicant's course of study and work; and should be supported, as far as possible, by certificates from professors or employers. In order to determine finally whether a teacher has sufficient technical knowledge of the subject which he seeks to teach, the Department may request him to undergo a special examination. Such special examination will, as a rule, be held in Dublin; and the applicant will have to bear his own travelling and personal expenses in connection therewith.

Registration of a teacher's qualification may be suspended (or further provisional recognition refused) upon evidence of insufficient knowledge of a subject for teaching purposes, or of inefficiency as a teacher from whatever cause arising.

APPENDIX B.

SUGGESTED SYLLABUSES FOR THE INTRODUCTORY COURSE
IN THE SUBJECTS OF (a) ENGLISH, (b) MATHEMATICS,
AND (c) DOMESTIC ECONOMY.

ENGLISH.

The aims of the instruction in English should be :

- (1) to train the students to follow intelligently what they hear or read ;
- (2) to enrich their vocabulary, and thus give them a wider range of thought and larger powers of expression ;
- (3) to develop the power of thinking accurately and in connected sequence ;
- (4) to cultivate facility and clearness of expression in speech as well as in writing.

The methods of teaching adopted will, of course, vary with the knowledge and experience of the teacher. Any good programme, however, will include a course of reading. The teacher will recommend carefully-selected books, of which an ample choice is now available at small cost. The scheme of study should be closely connected with the reading of these selected books.

The parts of speech.—The minutiae of parsing should be omitted.

Analysis of simple and complex sentences.—The purpose of this exercise is to make evident the conditions of clear expression. When the relation of a chief word, or of a phrase, or of a whole clause to the rest of the sentence has been established, it is unnecessary to proceed further.

Correction of faulty sentences, especially such as are met with in the oral and written answers of the students.

To write from dictation short passages previously prepared by the students.

To paraphrase a short excerpt in prose or verse.—The extract should be dealt with clause by clause orally in class before the written exercise is undertaken.

To summarize a paragraph.—This exercise should be done by individual students orally after the paragraph has been read silently by the class.

To precise a selected essay or chapter of a book.

Instruction and exercise in the taking of notes

To write a short essay of 200 to 300 words upon a familiar subject.—The topics should occasionally be one with which the students have become acquainted in the course of their reading. Advantage should be taken of interesting local events to secure a good descriptive letter. Where Science is taught as a subject of the Introductory year, the material for composition may fitly be drawn from the notes of lessons.

To be familiar with the meaning of the chief English, Latin, and Greek prefixes and affixes. To know the chief Latin and Greek roots used in the formation of English words. Students require some knowledge of word formation and derivation to deal intelligently, by comparison and classification, and not by intuition or memory, with the many new words which will be met with in books, but are not in ordinary use.

To know the meaning of the Latin and French words, phrases, and abbreviations which are in common use.

MATHEMATICS.

The Metric System.

Elementary Measurement of the rectangle, triangle, circle, rectangular solids, cylinder, pyramid, cone, and sphere. (The formulae should be established by experimental methods. Exercises should be worked in both the British and Metric systems of measurement.)

Simple Proportion and percentages by the unitary method.

The reduction and conversion of weights and measures.

Addition, subtraction, multiplication, and division of decimal and vulgar fractions. Simplification of fractional expressions.

Simple exercises in Mental Arithmetic may be given at each lesson. (The examples should be specially prepared and retained for use at a later lesson.)

Simple Interest. (Easy examples should be worked by the unitary method to establish the formula $I = \frac{P \times T \times R}{100}$. Problems in finding Principal, Time, and Rate should be solved by manipulating the equation.)

Evaluation of equational formulae, such as are used in Engineering practice by the substitution of numerical values.

Simple equations and problems producing simple equations with one unknown quantity.

(NOTE.—In dealing with the remaining portions of the syllabus, constant use should be made of the ruler, set square, protractor and squared paper. The students should be led to establish the truths involved from the results of their own observations. The working of numerical problems will assist in fixing the established truths in the memory.)

Angles, triangles, and polygons. The protractor and its use in finding the magnitude of angles. Angle in a semi-circle. Angles in a segment of a circle. Equality of alternative and vertically opposite angles. Sum of angles in a triangle. Angles in a quadrilateral inscribed in a circle. Angles in polygons.

Ratio. Comparison of the ratio of the sides of a triangle with that of the sides of the smaller triangle formed by drawing a line parallel to the base of the first. Division of lines in given ratios. Determination of the ratio of the diagonal of a square to its base; and of the altitude of an equilateral triangle to its base. The comparison of the ratio of the diameters of two circles with that of their circumferences. Meaning of proportion. Expression of proportion by an equation.

Meaning of sine, cosine, and tangent of an angle. Determination of values in a few cases. Construction of angles when the value of the sine, cosine, or tangent is given.

[155]

Similar triangles. Determination of mean proportional. Areas of similar figures proportional to the squares of their linear dimensions. The square on the hypotenuse of right-angled triangle.

DOMESTIC ECONOMY.

The following outline Syllabus indicates the scope of a Course which might with advantage be followed. It is not intended to indicate the order in which the exercises should be followed, or to restrict the energies of the teacher. The Course as suggested may be modified to suit local conditions. Each Section of the Syllabus should, however, be treated during the Session.

COOKERY.

Primary principles of Cookery. Classification of foods in daily use. Selection of various food stuffs and marketing. Setting of tables and serving complete meals. Cleaning and care of range and all kitchen utensils.

Soups.—Potato. Lentil. Broth.

Fish.—Fried. Boiled. Steamed. Fish Pie.

Meat.—Boiled Mutton. Irish Stew. Fried Steak. Grilled Chop. Beefsteak Pudding. Stewed Rabbit. Boiled Bacon. Shepherd's Pie.

Vegetables.—Potatoes—boiled and fried. Turnips. Carrots. Onions. Haricot Beans. Cabbage.

Sweets.—Suet, Rice and Bread Puddings. Pancakes. Cornflour Mould. Stewed Fruit. Jam Tart.

Bread, etc.—Brown and White Soda Bread. Scones. Jam Sandwiches. Raspberry Buns. Gingerbread.

Invalid.—Beef Tea. Steamed Custard. Whey. Gruel. Egg Flip. Flax Seed Tea. Lemonade. Steamed Chop or Fish.

Sundries.—Porridge. Tea. Coffee. Cocoa. Egg Cookery. Baking Powders.

LAUNDRY WORK AND HOUSEHOLD KNOWLEDGE.

Washing and Finishing White Clothes, Woollens and Prints.

Removal of stains.

Care and Management of Laundry Utensils.

Use of various Cleaning agents.

Simple methods of Ventilation. Sanitation and Disinfection.

Cleaning of Windows, Lamps, and Boots.

Making simple Home Remedies, poultices, embrocations, etc.

NEEDLEWORK.

One hand-sewn undergarment, or cooking overall.

Patching of worn garments.

Darning of stockings.

APPENDIX E.

SUGGESTED FORM FOR THE SUBMISSION TO THE DEPARTMENT OF PROPOSALS
FOR COURSES OF INSTRUCTION.

(NOTE.—In the second and following years of specialisation a Student must take a more advanced syllabus of the main subject of his course. In addition, a subject specially set out below for any particular year may be taken, or any syllabus selected from those set out for the preceding years which was not previously studied.)*

I.—INTRODUCTORY COURSE :

English, Mathematics, and

II. SPECIALISED COURSES :

(a).Course.

First Year :

Second Year :

Third Year :

Fourth Year :

(b).Course.

First Year :

Second Year :

Third Year :

Fourth Year :

* A subject having once been included in the course for any year need not be mentioned in the course for subsequent years.

N.B.—The main subjects of each course should be indicated by an asterisk.

EXAMPLES OF SCHEMES OF TECHNICAL INSTRUCTION IN NON-AGRICULTURAL SUBJECTS.

COUNTY FERMANAGH.

TECHNICAL INSTRUCTION SCHEME.

1st August, 1913, to 31st July, 1914.

The Scheme, subject to the provisions requiring local contributions from the rates, is applicable to the Urban District of Baniskillen, and to the Rural Districts within the administrative area of the County Council.

Population of the County—Urban District, 4,847; Rural Districts, 50,969; total, 61,836.

Valuation of the County—Urban District, £14,351; Rural Districts, £223,542; total, £242,393.

Value of 1d. rate—Urban District, £60; Rural Districts, £852; total, £1,012.

The local contribution from rates will be paid over to the Committee in two instalments, in April and October, 1913.

Technical Instruction Committee.

The Committee is a Joint Committee of the County Council and the Urban District Council of Baniskillen. It consists of twenty members, of whom twelve are Councillors, and eight added members.

Chief Industries.

The population is almost entirely devoted to agricultural pursuits.

Objects of the Scheme.

The objects of the Scheme are to provide instruction in lace and crochet work, needlework, manual training (woodwork), domestic economy, and hygiene.

The Scheme is set out under the following heads:—

I. Finance.

II. Instruction in Industries.

III. Instruction in Domestic Economy subjects, and Manual Training.

IV. Training School for Lace Teachers.

V. General Conditions.

I. FINANCE

A. Estimated Income:

1. Contribution from the County Council from rates levied over the Rural Districts in the Financial Year ending 31st March, 1914	£350
2. Contribution from the Urban District Council of Baniskillen (the produce of a rate of 1d. in the £ levied in the Financial Year ending 31st March, 1914)	59
3. Contributions from the Department:—	
(1) Annual contribution from Endowment	2400
Less amount equal to one-half the grant earned under Section II (b) of the Programme for Technical Schools, etc.	30
	370
(2) Grants under the Programme for Technical Schools, etc.	
(a) Under Section II (a), etc.	140
(b) Under Section II (b)	60
	200
4. From extern Day Secondary Schools for services of Teachers	40
5. Students' Fees and Sales of Products of Classes	60
Total	£1,079

B. Estimated Expenditure :

1. Salaries and expenses of Teachers of Industrial Subjects ..	£320
2. Salary of Principal of Enniskillen Technical School ..	170
3. Salary of Instructor in Manual Work	125
4. Salary of Instructors in Domestic Economy	80
5. Salaries of other Teachers at Enniskillen Technical School ..	120
6. Travelling Expenses of Teaching Staff, referred to at (3), (4) and (5), and class expenses	80
7. Scholarships at Enniskillen Technical School	20
8. Rents, Insurance, Interest on, and repayment of Loan ..	40
9. Administration and Incidental Expenses :—	
(a) Secretary's Salary	£60
(b) Office expenses, printing, stationery, advertising, etc.	60
	120
Total	\$1,075

Note :

The balance of the funds for the present academic year will be applied to such purposes as the Committee, with the approval of the Department may, from time to time, determine.

II. INSTRUCTION IN INDUSTRIES.

To improve the work in lace and crochet-making and in needlework carried on throughout the county, the Committee may appoint nine teachers. These teachers will give instruction in centres to be fixed by the Committee, with the approval of the Department, and each teacher will be required to give two lessons of three hours' duration each, on three days per week (or an equivalent amount of teaching), throughout the session. The two lessons per day may, or may not, be given in the same centre; but arrangements will be made whereby at least six hours' instruction per week shall be given at each centre.

A salary of £60 per annum may be allowed when the teacher is employed for thirty hours, or upwards, per week.

Conditions under which the Classes will be held.

(1) A local Committee to be formed, who shall make known the objects of the instruction, obtain a suitable class-room, and be responsible for the proper cleaning and lighting of the room.

(2) All changes in the Time Table of the classes to be at once notified to the Committee.

(3) An accurate account of all receipts and expenditure to be kept for each class in the books provided for the purpose by the Department.

(4) A deduction of one penny per shilling to be made from the sale price of all articles. (The amounts so raised will be applied in meeting the cost of rent, fuel, postage, laundering, and incidental expenses, and in forming a fund to be used in paying ready cash for work done).

(5) Laundering to be paid for at a rate not exceeding 5d. per pound's worth of work washed.

(6) Should the fund referred to at (4) above exceed, at the close of any academic year, one-tenth of that year's sales, a bonus may be granted out of the excess to each worker, at a rate of not more than 6d. per £. of the wages paid in the case of lace and crochet-workers, and 1d. per £. in the case of spriggers. (This bonus will only be paid after the accounts have been audited by the Secretary to the County Committee, and on his certificate that the position of the industry warrants such payment).

(7) Any balance of the excess which may remain after providing for the above purposes to be returned to the County Committee.

III. INSTRUCTION IN DOMESTIC ECONOMY AND MANUAL TRAINING.

The Committee will appoint an instructress in Domestic Economy subjects and Hygiene, and an instructor in Manual Training (woodwork), who shall conduct courses of instruction in these subjects at centres and at times to be fixed by the Committee, with the approval of the Department.

These courses will consist of at least thirty lessons of two hours' duration each, and will extend over a period of about six weeks. A fee not exceeding 2s. 6d. will be charged for admission to each class.

IV. TRAINING SCHOOL FOR LACE TEACHERS.

A school for the training of skilled workers as teachers of lace and sprigging classes will be conducted in connection with the Technical School, Enniskillen. Instruction will be provided in lace-making, or sprigging, banding, drawing and design, English, commercial arithmetic, business procedure, and hygiene.

Classes will be held daily under the supervision of a principal holding special qualifications.

Students, while in attendance at the school must continue to practice their industry.

Candidates for entrance must pass an examination in English, arithmetic, drawing, and lace-making or sprigging.

Recognition of qualifications to give instruction in lace-making or sprigging will be accorded to those students only who attend satisfactorily during one complete session of twelve months, and who reach a satisfactory standard in an examination which will be held by the Department.

V. GENERAL CONDITIONS.

(1) The Scheme is not intended to apply to children under fourteen years of age, but such children who have been placed in the Sixth Class of a National School, or who have received an equivalent education, may be admitted to classes, provided that there is accommodation available. Under no circumstances may scholars on the roll of a Primary School attend classes under this Scheme which meet during Primary School hours.

(2) Schools or classes conducted or aided under the provisions of the Scheme shall be at all times open to the Department's Inspectors. (The Inspectors will, from time to time, report to the Department on the condition and suitability of the school buildings or class-rooms, the character of the instruction and its suitability to the needs of the locality, the sufficiency of the teaching staff for the number of students under instruction, the progress of the students—which they may ascertain in such a manner as may be necessary—the method of registration, and, generally, the observance of the provisions of the Scheme).

(3) All classes eligible for grants under the conditions of the Programme for Technical Schools and Classes shall be conducted in accordance with the Regulations of the Programme.

(4) Classes conducted or aided under the Scheme shall not be of such a size as to impair the efficiency of the instruction. (A practical class should consist of not more than twenty students under one teacher, and a theoretical or demonstration class of not more than forty students. Local Committees should assist teachers in keeping classes within these limits).

(5) Control will be exercised over the admission to classes so that students may take only associated subjects, and admission to certain classes may be limited by entrance examinations in order that the classes may be of a manageable size, and that students selected may be capable of taking full advantage of the instruction.

(6) Classes will, unless in exceptional circumstances, be closed should the average attendance for four successive lessons fall below six.

(7) Attendance Registers shall be carefully, regularly, and punctually marked.

(8) A Local Committee of Management shall be formed in each centre in the Rural Districts where classes are to be held. The Committee formed shall appoint an Honorary Secretary, and place itself in communication with the County Joint Committee. In an Urban District the classes shall be under the management of a Local Committee appointed for this purpose by the Urban District Council. Wherever the instruction of girls is involved, a number of ladies should be included in the Local Committee.

The duties of a Local Committee are:—

- (a) To arrange for suitable accommodation for the courses of instruction to be given; to awaken local interest, and to make due provision for the starting or resumption of the courses.
 - (b) To assist in securing regular and punctual attendance at the classes.
 - (c) To visit the classes from time to time, and to check and sign the registers, and
 - (d) To make recommendations to the County Committee as to local requirements in connection with the classes.
- (9) Full particulars of the qualifications and experience of any teacher whom it is proposed to engage shall be submitted to the Department, and their approval of the appointment obtained, in writing, before the appointment is actually made.
- (10) The previous written approval of the Department shall be obtained for any expenditure upon additional equipment, or for any purpose not covered by the proposals under the head of Finance. (Approval of such expenditure will not be given unless the proposals have been submitted for the Department's sanction before any liability is incurred).
- (11) Accurate returns of such particulars as are required by the Department shall be made at the specified times.
- (12) Within seven days after any meeting of the Committee, a copy of the minutes of proceedings of that meeting, as entered in the minute book, shall be furnished to the Department.
- (13) The accounts of the Committee shall be treated as part of the accounts of the Local Authorities, and will be audited as such by the Auditor of the Local Government Board.
- (14) No money shall be spent under this scheme in an Urban District, unless the Urban District contributes annually a rate of 1d. in the £, or its equivalent.

The Scheme is subject to revision at the close of the academic year.

COUNTY GALWAY.

TECHNICAL INSTRUCTION SCHEME.

1st August, 1913, to 31st July, 1914.

The Scheme, subject to the provisions requiring local contributions from rates (see Finance), is applicable to the Urban District of Ballinasloe and to all the rural districts within the administrative area of the County Council.

Population of the area administered under the Scheme:—Urban District, 5,169; Rural Districts, 163,890; total, 169,059.

Valuation of the area administered under the Scheme:—Urban District, £9,312; Rural Districts, £444,455; total, £453,767.

Value of 1d. rate:—Urban District, £30; Rural Districts, £1,852; total, £1,881.

The local contribution from rates (Urban and County) will be paid over to the Committee before the close of the financial year ending 31st March, 1914.

[161]

Technical Instruction Committee.

The Committee is a Joint Committee of the Galway County Council and the Urban District Council of Ballinasloe. It consists of sixty-one members, of whom fourteen are Councilors, and forty-seven added members.

Chief Industries.

Agriculture and allied industries, fisheries, distilling, woollen weaving, machine knitting, marble quarrying, etc.

Objects of the Scheme.

The objects of the Scheme are to provide, mainly by means of Itinerant Instructors, and scholarships for boys, instruction in science, technological, commercial, industrial and domestic economy subjects, and to maintain a Technical School in the Urban District of Ballinasloe.

The Scheme is set out under the following heads:—

- I. Finance.
- II. Itinerant Instruction.
- III. Instruction in Industries.
- IV. Technical School, Ballinasloe.
- V. Technical and Apprenticeship Scholarships for Boys.
- VI. General Conditions.

I. FINANCE

A. Estimated Income.

(1) Local Contributions:

(a) From rates levied over the Rural Districts in the Financial Year ending 31st March, 1914	\$900	
(b) The produce of a rate of 1d. in the £. levied over the Urban District of Ballinasloe in the Financial Year ending 31st March, 1914.	25	1925

(2) Contributions from the Department:—

(a) Annual Contribution from Endowment ..	\$800	
Less amount equal to one half of the grant earned under Section II. (b) of the Technical School Programme (see below)	200	600
(b) Grants under the Programme for Technical Schools, etc.	30	
(i.) Under Section II. (a).	400	
(ii.) Under Section II. (b).	50	
(iii.) Under Section IX. (a).		480

(3) Sundry Receipts,	15	
Total	\$2,030	

B. Estimated Expenditure:

(1) Instruction in Rural Areas:

(a) Salaries of three Instructresses in Domestic Economy	\$315	
(b) Salary of one Instructress in Hygiene and Sick Nursing	35	
(c) Salaries of two Instructors in Manual Work ..	260	
(d) Salary of one Teacher of Dressmaking	70	
(e) Travelling Expenses of Teachers	80	
(f) Class Expenses, including cost of supplies, rent of rooms, removal of equipment, etc.	140	

(2) Permanent Centre of Instruction—Ballinasloe Technical School :—

(a) Salary of Headmaster	£150	
(b) Salary of Commercial Instructor	150	
(c) Rent, Maintenance of Classes, etc.	150	
		450
(3) Scholarships for boys		400
(4) Administrative and incidental expenses :—		
(a) Salary of Secretary	£100	
(b) Office Expenses, printing, stationery, advertising, etc.	40	
(c) Depuration Expenses and Sundries	10	
		150
Total		£1,960

C. Allocation of Accumulated Funds :

The funds remaining unexpended on the working of the Scheme in previous sessions, together with the balance of the funds for the present academic year will be reserved for such purposes, as the Committee, with the approval of the Department, may, from time to time, determine.

II. ITINERANT INSTRUCTION

(1) The Itinerant teachers are under the control of the Committee, and will receive their instructions through the Secretary to the Committee.

(2) In centres where a course of instruction is to be held for the first time, it will, in general, be desirable for the instructor to pay a preliminary visit in order to see that the proposed accommodation is available, and to confer with the local Committee with regard to arrangements for the course.

(3) The Itinerant teachers will, as a rule, be expected to give not less than four hours' actual teaching five days each week. (The general regulations for the employment of itinerant teachers are set forth in the Department's Circular Letter, No. 21).

(4) The Committee will distribute a Form of Application for courses of instruction by itinerant teachers, and submit to the Department a timetable and Itinerary showing the proposed distribution of the time of the itinerant teachers for the session 1913-14.

(5) The courses in domestic economy will, as a rule, be of six weeks' duration, lessons being given each day, but, where it can conveniently be arranged, two courses may be conducted concurrently. In this case the duration of the course will be three months, half the time in each week being devoted to one centre and half to the other. The same rule will, in general, apply to the courses in manual instruction.

(6) The teacher of sick nursing and hygiene shall give short courses of practical instruction in selected centres, in accordance with a time-table to be previously approved by the Department.

(7) In the case of the courses conducted by one of the Domestic Economy Instructors the Committee will rent a cottage in a populous district, preferably a district containing a number of labourers' cottages. The Instructors will reside in the cottage and will conduct classes on certain days weekly for a fixed period, say, ten or twelve weeks. The cottage will be furnished with essentials only and in keeping with the requirements of a cottage of its class. It will be managed so as to show how a household may be conducted on limited resources. The time of the Instructors which is not occupied in class work at the cottage will be devoted to making house to house visits in the neighbourhood with a view to affording such information in practical subjects as the circumstances of cases may suggest, special attention being given to practical demonstration in the proper use of such utensils and food materials as are available in the majority of cottages.

The number of students admitted to a class held at the cottage in which the Instructor resides should not exceed eight or ten. The necessary furniture will be provided by the Committee.

(8) All expenses in connection with these courses are borne by the Committee.

(9) This Section shall apply to the staff of the Technical School, Ballinasloe, when engaged in teaching in the rural areas.

III. INSTRUCTION IN DRESSMAKING.

The services of the teacher of dressmaking will be available at any centre in the County which may be selected by the Committee. If a satisfactory attendance of pupils is not maintained at any centre the classes will be discontinued and the teacher transferred to another centre at which satisfactory arrangements can be made for taking advantage of the instruction.

IV. TECHNICAL SCHOOL, BALLINASLOE.

A sum of £300 is provided for salaries of teachers at the Technical School, Ballinasloe, and £150 is provided for the maintenance of the School and for the provision of such additional teachers as may be decided upon with the approval of the Department.

In addition to the courses conducted by the Headmaster and Commercial teacher, the County Committee may, if they consider it desirable, provide courses in Hygiene and Dressmaking.

The services of the whole-time officers engaged at the school will also be utilised for the purpose of conducting courses in rural districts of the county.

V. APPRENTICESHIP SCHOLARSHIPS FOR BOYS.

(1) The object of these Scholarships is to provide, for boys of 13 years of age and upwards, who have completed their primary school course, a training such as will directly prepare them for a trade or industrial calling, and further to help them by actually apprenticing them to selected trades or industries under the most favourable conditions.

(2) The Scholarships will be awarded upon the results of a competitive examination of which particulars are given below, and only boys who have, during the preceding school year, been in regular attendance at one of the following classes of schools will be eligible to compete, viz. :—

- (i) Primary Schools (only boys who have completed the course of the Sixth Standard of the National School Programme, or its equivalent, will be eligible to compete).
- (ii) Elementary Evening Schools, conducted under the Rules and Regulations of the Commissioners of National Education.
- (iii) The Preparatory Course of Evening Technical Schools.

Boys who have, at any time, been students of a Secondary, or a Day Trades Preparatory School, are not eligible to compete for Scholarships.

(3) During the first year of the Scholarship the holder must attend a Day Trades Preparatory School, or other School the main object of which is the instruction of pupils of an industrial type, and which provides a course exclusively followed by the pupils attending it, equivalent to that of a Day Trades Preparatory School. The choice of School will remain with the winner of the Scholarship, or his parent (or guardian) subject to the approval of the Department.

(4) During the period of attendance of the Scholar at an approved Day School the following grants will be made to the Scholar's parent (or guardian) :—

- (i) £5 per annum if the School is within a radius of five miles from the home of the Scholar.
- (ii) £10 per annum if the School is outside a radius of five miles from the home of the Scholar (grants of this amount will be made

only if there is no approved School within a radius of five miles).

- (iii) £20 per annum if attendance at an approved School necessitates the Scholar's residing away from his home.

These grants will be paid in equal instalments on or about the 15th October, 15th January, 15th April, and 15th July. The second and subsequent instalments will be paid only after satisfactory reports of attendance and progress have been received from the School authorities.

(5) After completing one session at the Day Trades Preparatory, or other approved School, arrangements will be made, if the holder has then attained the age of 16 years, for his apprenticeship to a suitable trade. If the holder has not then attained the age of 16 years he will be required to continue his attendance at the School until he has attained that age. (In special cases, where it is the custom of the trade to receive apprentices at an earlier age than 16 years, arrangements may be made for the apprenticeship of scholars who have not attained 16 years of age. In no case, however, will a scholar be permitted to proceed to apprenticeship until he has completed at least one session in an approved Day School.)

(6) The choice of the trade to be followed will remain with the holder of the Scholarship, subject to the approval of the Department.

(7) It will be a condition of tenure that the holder shall be duly indentured to a firm recognised by the Department for the purpose of these Scholarships, and under conditions which have been approved of by them.

(8) It will also be a condition of tenure that the holder shall follow an approved course of study in an Evening Technical School, or a Special Course of instruction for Apprentices organised under the Department's Programme for Technical Schools and Classes, and Scholars must submit, for the approval of the Department, a time-table of their proposed courses of study under these conditions. Scholars will be required to begin attendance at the approved course of study at the same time that they are admitted to apprenticeship, or as soon thereafter as practicable.

(9) During the period of apprenticeship the Scholar will be paid such sums as will, together with the weekly rate of wages specified in the indentures, amount to 15s. per week. These sums will be paid in such instalments as may be approved by the Department, regard being paid to the special circumstances of each case.

(10) Any bonus which may be paid by an employer will not be taken into account in arriving at the amount to be paid to a Scholar, and no allowance will be made for deductions made by the employer in respect of time lost, holidays, sickness, or otherwise.

(11) Subject to satisfactory reports by the Department's Inspector, a Scholarship is renewable from year to year until the term of apprenticeship is completed. It may, however, subject to the approval of the Department, be determined by the Committee at any time without notice, should its continuance for any reason appear undesirable.

(12) In the case of difficulties arising in connection with the award or retention of Scholarships the matter will be referred to the Department whose decision shall be final.

(13) In selecting Firms with whom Scholars may be apprenticed, the Department will give preference to those prepared to offer the following facilities:—

- (i) Satisfactory arrangements to be made whereby the Scholars will have an opportunity of learning all the branches of the trade selected by them.
- (ii) In centres where provision is made for suitable Day Classes, Scholars to be permitted to attend during working hours such classes as the Department may approve, the total number of hours so allowed not to exceed an average of eight hours weekly. The Scholars to be paid for the time spent at these classes, but the total number of hours worked, including the hours of attendance at classes, shall not exceed that recognised in the particular trade as constituting a week's work.

- (iii) Where suitable Day Classes are not available, facilities to be given to Scholars to attend a course of instruction in Evening Technical Schools or Classes, the working hours to be reduced by an equivalent number of hours, such reduction not to exceed a total of eight hours per week.
- (iv) The Department's Inspectors to be entitled to visit the various places where the Apprentices are employed at any time during working hours, and to inquire into grievances or complaints that may be made either by the employer or the Scholar.
- (v) The Department to have power to cancel the Indentures or to transfer the Apprentices to other Firms if for any reason it appeared desirable to them to do so.
- (14) When an Apprenticeship Premium is payable, the Department will be prepared, in approved cases, to provide for its payment.

EXAMINATION FOR APPRENTICESHIP SCHOLARSHIPS, JUNE, 1914.

(15) The Examination will be held by the Department of Agriculture and Technical Instruction on the 4th June, 1914, at centres which will be fixed when all the applications have been received. The subjects and time-table of the examinations will be:—

Arithmetic.—Thursday, June 4th, 11 a.m. to 12.30 p.m.

The principles of Vulgar and Decimal Fractions, with examples involving addition, subtraction, and multiplication.

Proportion, Simple Interest, Practice, Unitary Method.

The Metric System.

Methods of Weighing and Measurement.

Measurement of lengths, areas, and volumes.

English.—Thursday, June 4th, 1 p.m. to 2.15 p.m.

Composition: A short essay or letter, of thirty or forty lines—with correct spelling, grammar and punctuation—on some familiar subject.

Ability to answer, in fully-formed sentences, questions on the meaning of words and phrases, and on the matter of a passage read.

Grammar: The construction of words; prefixes, affixes, and roots.

Analysis of simple and complete sentences.

Correction of faulty sentences.

Paraphrasing a short poetical extract.

Drawing.—Thursday, June 4th, 2.30 p.m. to 3.30 p.m.

1. Freehand Drawing.

2. Simple exercises in Design.

3. Model Drawing of Simple Common Objects.

4. Simple Geometrical Drawing.

And in cases in which Committees decide that Irish and Mathematics shall be included as optional subjects of examination,

Irish.—Thursday, June 4th, 3.45 p.m. to 5.15 p.m.

1. An *Arda Brac*. *Tadhg Galla*: with questions on grammar, etc., arising out of the text.

2. A passage, or passages, from some other Irish text or texts for translation into English.

3. Short sentences, colloquial phrases, and a short passage for translation from English into Irish.

Mathematics.—Thursday, June 4th, 4.35 p.m. to 5.15 p.m.

Algebra.—Problems involving simple and simultaneous equations, fractions, factors, and square root.

Euclid.—Book I., with practical exercises on the problems.

Practical Geometry.—Measurement of rectilinear figures from Diagrams drawn to scale.

Candidates will be required to draw and measure simple geometrical figures accurately.

Candidates may be examined on any part of these Syllabuses.

One hundred marks will be assigned for Arithmetic, one hundred for English, fifty for Drawing, and fifty for Irish or Mathematics.

(16) Only those candidates will be eligible for admission to the examination :—

(a) Who will be over thirteen and under fifteen years of age on the 1st August, 1914 ;

(b) Whose parents or guardians have been resident in the area administered by the Technical Instruction Committee for at least one year immediately preceding the 15th May, 1914.

(17) Forms of application for admission to the examination may be obtained from the Secretary to the Committee, and must be returned, duly filled in, by the 15th May.

(18) Successful Candidates will be required to furnish, for the inspection of the Technical Instruction Committee, an authenticated copy of certificate of birth, and a certificate of sound health from a duly qualified medical practitioner.

(19) The Committee may refuse to award the full number of Scholarships offered for competition should a sufficient number of qualified candidates not show sufficient merit.

Early in the Academic Year, 1913-14, copies of the Scholarship Scheme shall be sent to all Schools eligible to present candidates, situated within the area administered by the Committee, and an advertisement of the Scheme and of the number of Scholarships to be competed for in June, shall be inserted once during the month of May in the newspapers circulating within this area.

VI. GENERAL CONDITIONS.

(See Section V. Scheme for County Fermanagh).

COUNTY LIMERICK.

TECHNICAL INSTRUCTION SCHEME.

1st August, 1913, to 31st July, 1914.

The Scheme, subject to the provisions requiring local contributions from rates (see Finance), is applicable to all the Rural Districts within the administrative area of the County Council.

Population of the county, 164,551. Valuation, £475,609. Value of 1d. rate, £1,581.

The local contribution from rates will be paid over to the Committee after the meeting of the County Council to be held in September, 1913.

County Committee of Agriculture and Technical Instruction.

The Committee was appointed in June, 1913, and will cease to hold office in June, 1914. It consists of sixty members, of whom forty are County Councillors, and twenty added members.

Chief Industries.

The most important industries (excluding agriculture and allied industries) are brick-making, weaving, and the preparation of manures.

Objects of the Scheme.

The objects of the Scheme are to provide instruction in science, art, manual work, domestic economy, and industrial subjects.

The Scheme is set out under the following heads :—

I. Finance.

II. Itinerant Instruction.

III. Technical Classes for Girls.

IV. Domestic Economy Day Classes at the Convent of Mercy, Doon.

V. Apprenticeship Scholarships for Boys.

VI. General Conditions.

[167]

I. FINANCE.

A. Estimated Income :

(1) Contribution from the County Council from rates levied in the financial year ending 31st March, 1914	£215
(2) Contributions from the Department :—	
(i) Annual Contribution from Endowment	£430
Less amount equal to one-half the grant earned under Section II. (b) of the Programme for Technical Schools and Classes	87
	£343
(ii) Grants under the Programme for Technical Schools and Classes :	
(i) Under Section IX. (b)	£174
(ii) Under Section IX. (a)	50
	£224
	567
Total	£782

B. Estimated Expenditure :

(1) One Manual Instructor (Salary, expenses and renewal of equipment)	£180
(2) Salaries and Expenses of two Instructresses in Cookery and Laundry-work	280
(3) Salary and Expenses of one Instructress in Needlework	120
(4) Grants to Technical Classes for Girls	100
(5) Day Classes in Domestic Economy at the Convent of Mercy, Deon	40
(6) Materials, heating, lighting, etc., in connection with classes other than those working under Sections III. and IV. of the Scheme	100
(7) Scholarships for Boys	100
(8) General Administration Account	100
Total	£1,000

C. Allocation of Accumulated Funds :

Of the funds remaining unexpended from the working of the Scheme in previous sessions, the sum of £278 will be appropriated to meet the estimated deficit on the working of the Scheme for the present session. The remainder will be applied for such purposes as the Committee, with the approval of the Department may, from time to time, determine.

II. ITINERANT INSTRUCTION.

The Instructors will conduct short courses of Manual Instruction and Domestic Economy at centres where suitable arrangements can be made for the accommodation of Classes. The courses will be as practical in character as possible, and will, in the case of Manual Work, include instruction in the use of tools employed in woodwork, and in the nature and special use of the various kinds of wood.

A course shall consist of not less than thirty lessons, extending over a period of six weeks. Two centres may, however, be taken concurrently for a period of twelve weeks, but the minimum number of lessons at each centre will still be thirty. These periods may be extended if the Committee and the Department are satisfied that there is need for such extension.

Each Instructor shall conduct two classes, each of not less than two hours' duration, on five days in the week.

Equipment and all necessary materials will be provided by the Committee, except in the case of classes in Needlework, where pupils will be required to provide their own.

Not less than three weeks before a new centre is opened, the Instructor concerned shall select a Saturday on which to visit the proposed centre, in order to make all necessary arrangements for the reception of equipment, and to take such steps as may be deemed advisable for the successful opening of the classes.

An Instructor who visits a new centre and finds that adequate accommodation has not been provided for the proposed course shall report the case immediately to the Secretary to the Committee, who will then take other steps to secure the necessary accommodation. If satisfactory accommodation cannot be secured, the Instructor will be sent to another centre.

Arrangements with railway and other agents will also be made for the carriage and prompt delivery of equipment to the new centre, and the Instructor will be called upon to account for any undue delay that may occur in connection with the same.

III. TECHNICAL CLASSES FOR GIRLS.

Subject to the conditions set forth below, stipendium grants at the rate of £3 per pupil for any number not exceeding ten, and at the rate of £2 per pupil for the remainder of the class, will be paid in respect of the attendances of the girls at instruction in Lace-making, Crochet-work, Dressmaking, Needlework, Springing, Embroidery, Drawn Thread Work, Shirt-making, Hosiery-making, or such other industrial or domestic subject as may, from time to time, be approved by the Department.

In certain industrial subjects, such as Lace-making, a knowledge of Drawing is of great value to the worker. Where provision can be made for efficient instruction in Drawing, a further grant of 10s. per pupil may be paid in respect of those girls who have qualified for the grant referred to in the foregoing paragraph and have received not less than forty hours' instruction in Drawing.

General Conditions for the Conduct of Classes and Payment of Grants.

(1) The industry in which instruction is given shall be suited to the circumstances of the locality.

(2) The grant may be claimed on account of pupils who have received during the session not less than 240 hours' instruction, as specified in Section 4 below. In order to qualify for the additional grant for Drawing, a pupil must receive not less than 40 hours' instruction in that subject in addition to the 240 hours' instruction above-mentioned.

(3) Grants may be paid in respect of a pupil's attendance at instruction in any one industrial subject for not more than two school sessions, but where circumstances have made it desirable to introduce a new industry, grants may be paid on account of a pupil for not more than three school sessions in all.

(4) The pupil, as part of the 240 hours' instruction, shall receive at least 40 hours' instruction in Domestic Economy subjects. (The 40 hours' instruction may be given in twenty lessons of two hours each, and must include practice. At least 30 hours must be devoted to Cookery; 10 hours may be given to Laundry-work. Not more than 60 hours' instruction in Cookery and Laundry-work may be reckoned in the total of 240 hours.)

(NOTE.—In order to assist managers of classes working under this section of the Scheme, to satisfy the conditions in regard to instruction in Domestic Economy, the Committee may, if they think it desirable, send a County Instructress to give the required course of instruction. It must be understood that where the services of the Committee's Domestic Economy Instructresses are granted, the managers of the class are required to provide fire, light, and the necessary materials. The instruction given must be such as is applicable to the home life of those attending the course.)

(5) The equipment and instruction must be satisfactory. (The Department's Inspectors will be specially directed to report how far the work is instruction, and how far the practice of an industry).

(6) The Sales and Wages Book and Attendance Registers must be satisfactorily kept.

(7) Grants will not be payable in respect of the attendance of pupils who are not over fourteen years of age at the time of admission to instruction, or who are on the Roll of a National School or of an Industrial School under the Irish Industrial Schools Act.

(8) Grants will not be payable under this section in respect of instruction in an industrial subject given by a teacher employed by the Committee.

(9) Managers intending to claim grants under this section must forward Form S. 47 to the office of the Committee on or before the 1st October, 1913.

(10) Instruction must begin, under a recognised teacher, before the 1st December at the latest.

Should the sum allocated for the purpose of this section of the Scheme not enable the Committee to pay off all the claims in full, at the rates mentioned above, the amount available will be divided in proportion to the claims admitted.

IV. DOMESTIC ECONOMY DAY CLASSES AT THE CONVENT OF MERCY, DOON.

Grants, not to exceed in all £40, may be allowed by the Committee, under the following conditions, for approved instruction given at the Convent of Mercy, Doon, by nuns whose qualifications have been recognised by the Department.

(NOTE.—Pupils attending Day Secondary Schools, National Schools, Industrial Schools (Government aided), or Technical Classes (Section III. of Scheme) may not be enrolled in these classes).

(1) The Committee will pay 27 10s. 0d. for a course of instruction. The course will consist of fifty lessons, of two hours' duration each. Approval of the proposed time-table must be obtained from the Department before a course is started.

(2) Two courses conducted concurrently will not be recognised unless one of the courses, at least, has a full complement of sixteen pupils.

(3) A pupil may be registered for two consecutive courses only. A pupil may not be registered for two courses conducted concurrently.

(4) New pupils may not be admitted to any course after the sixth lesson of that course.

(5) No payment will be made for any course of instruction in which the average attendance for the whole course falls below six.

(6) Reasonable charges for materials, fire and light, used for class teaching, and for necessary advertising may, on the production of satisfactory vouchers, be paid by the Committee.

(7) The fee to be paid by each pupil shall be 2s. for each course, and shall, together with any receipts from the sale of cooked dishes, be paid over to the Secretary to the Committee.

(8) A sum, not to exceed 2s. 6d. per week, may be allowed by the Committee, towards the expenses of cleaning, lighting, fires, etc., in connection with each course.

(9) The classes shall be open to females of all religious denominations.

(10) Notification of the formation of classes must be submitted through the Committee to the Department on Form S. 95.

V. APPRENTICESHIP SCHOLARSHIPS FOR BOYS.

Provision is made for the renewal of Scholarships held during the session 1912-13, and for the Scholarships awarded as a result of the examination held in June, 1913.

(For the conditions under which Scholarships are held, see County Galway Scheme, Section V., page 159).

VI. GENERAL CONDITIONS.

(See County Fermanagh Scheme, Section F., page [156]).

COUNTY LONDONDERRY.

TECHNICAL INSTRUCTION SCHEME.

1st August, 1913, to 31st July, 1914.

The Scheme, subject to the provisions requiring local contributions from the rates (see Finance), is applicable to the Urban District of Linnavady, and to the Rural Districts within the administrative area of the County Council.

Population of County :—Urban District, 2,467 ; Rural Districts, 89,393 ; Total, 92,060.

Valuation :—Urban District, £6,613 ; Rural Districts, £296,629 ; Total, £303,233.

Value of 1d. rate :—Urban District, £28 ; Rural Districts, £1,236 ; Total, £1,264.

Technical Instruction Committee.

The Committee is a Joint Committee of the County Council and the Urban District Council of Linnavady. It consists of eighteen members, of whom sixteen are Councillors, and two added members.

Chief Industries.

Linon manufacture, flour milling, and agriculture.

Objects of the Scheme.

The objects of the Scheme are to provide, mainly by means of Evening Schools and Itinerant Classes, instruction in Science, Art, Technological, Commercial and Domestic Economy Subjects, chiefly for persons engaged in various industries during the day.

The Scheme is set out under the following heads :—

- I. Finance.
- II. Subjects of Instruction.
- III. Instruction in Permanent Centres.
- IV. Itinerant Instruction.
- V. Instruction in Industries.
- VI. General Conditions.

I. FINANCE.

A. Estimated Income :

(1) Contribution from the County Council :—

- | | |
|---|-------|
| (a) The produce of a rate of 1d. in the £ levied over the Rural Districts of Coleraine, Linnavady, and Derry No. 1, in the financial year ending the 31st March, 1914 | £210 |
| (b) The produce of a rate of 1d. in the £ levied over the Rural District of Magherafelt, in the financial year ending the 31st March, 1914 | £199 |
| | 2,409 |

- | | |
|---|-----|
| (2) Contribution from the Urban District Council of Linnavady (the produce of a rate of 1d. in the £, levied in the financial year ending the 31st March, 1914) | £38 |
|---|-----|

[171]

(3) Contributions from the Department :—	
(a) From endowment	£514
Less amount equal to one-half the grant earned under Sec- tion II. (b) of the Programme for Technical Schools, etc. ..	£50
	£464
(b) Grants under the Programme for Technical Schools, etc. :—	
(i) Under Section II (a), etc. ..	£440
(ii) Under Section II (b) ..	100
	£540
(c) Special grant in aid of the purchase of equipment for the Metal Workshops at Linnavady and Magherafelt ..	£145
(d) Special grant towards the cost of the new Technical School at Magherafelt ..	£400
	£1,549
(4) Grant from the Commissioners of National Education for instruction in Domestic Economy to National School children	
(5) Students' Fees	25
(6) Sale of books, class materials, etc. ..	90
(7) From External School in respect of services of Art Teacher ..	35
(8) Subscriptions towards Portstewart Technical School ..	21
(9) Subscriptions towards the New Technical School at Maghera- felt	20
	£1
Total	£2,235

B. Estimated Expenditure :

(1) Salary of Principal and Secretary	225
(2) Salaries of two Instructors in Domestic Economy ..	170
(3) Salary of Manual Instructor	135
(4) Salary of Art Teacher	90
(5) Salary of Sprigging Teacher	50
(6) Salaries of other Teachers	245
(7) Wages of Carstakers	60
(8) Travelling expenses and maintenance allowances of Teachers	120
(9) Maintenance expenses (Permanent Centres)	55
(10) Maintenance expenses (Itinerant Instruction)	50
(11) Equipment	173
(12) Repairs to Premises	10
(13) Scholarships and Prizes	40
(14) Class materials	80
(15) Interest on, and repayment of Loans	182
(16) Provision to meet the additional cost of the new Technical School at Magherafelt	451
(17) Administration (including Salary of Office Assistant, £12) ..	90
Total	£2,235

II. SUBJECTS OF INSTRUCTION.

Introductory Course :

English, Mathematics, Drawing, Manual Instruction, Domestic Economy.

Commercial Subjects :

Shorthand and Typewriting Book-keeping, Business Methods,
Commercial Arithmetic, Commercial English, Commercial
Correspondence, French.

Mathematics :

Mathematics, Practical Plane and Solid Geometry

Handicraft :

Manual Instruction (Wood and Metal), Wood-carving.

Domestic Science :

Cookery, Laundry-work, Dressmaking, Needlework, Sick Nursing, First Aid Lectures.

Science (Pure and Applied) :

Carpentry and Joinery, Building Construction and Drawing.

Art :

Freehand, Model and Geometrical Drawing, Design, Drawing on the Blackboard, Drawing from Light and Shade, Painting.

The teaching of these subjects will be provided mainly by the following instructors :—

- (1) A Principal specially qualified to give instruction in Technological and Science subjects. His duties shall be :—
 - (a) To act as Secretary to the County Joint Technical Instruction Committee.
 - (b) To organise Technical Schools in the Urban District of Llanavady, in the Rural District of Magherafelt, and in the town of Portstewart, and to arrange for courses of instruction in such other centres as the Committee may, from time to time, decide upon, and generally to carry out the provisions of the Scheme, in accordance with the instructions of the Committee, acting in conjunction with the Department of Agriculture and Technical Instruction.
 - (c) To give instruction in the Technical Schools, and to supervise the work of the schools and classes.
- (2) One Instructor in Manual Work, two Instructresses in Domestic Economy subjects, and one teacher of Art Subjects, whose services shall be available in the Urban District of Llanavady, the Rural District of Magherafelt, in the town of Portstewart, and at such other centres as may, from time to time, be arranged.

III. INSTRUCTION IN PERMANENT CENTRES.

The administration of the Scheme in the Urban District of Llanavady, in the Rural District of Magherafelt, and in the town of Portstewart, will be in the hands of local Committees, appointed in accordance with the terms of paragraph 8 of the General Conditions.

The teaching will, for the most part, be given by the Instructors referred to in Section II. Any subjects not provided for by these Instructors may be taught by local qualified teachers.

IV. ITINERANT INSTRUCTION.

The services of the Instructors appointed under this Scheme will also be available, as far as may be possible, for other rural centres in the County. The instruction most likely to be of value in such districts is, in general, that which will be imparted by the teacher of Manual Work and the teachers of Domestic Economy.

The courses of instruction in Rural Districts will extend generally over six weeks, but where two centres can be worked concurrently, the course may extend over three months. In other case it will be possible to secure at least thirty lessons in each course.

V. INSTRUCTION IN INDUSTRIES.

To improve the work in Spelgging in the County, the Committee will appoint one teacher. This teacher will give instruction at centres to be fixed by the Committee, with the approval of the Department, and will be required to give five hours' instruction per day on five days (for an equivalent amount of teaching) throughout the season.

General Conditions upon which the Classes will be held.
(See County Fermanagh Scheme, Section II., page 154).

VI. GENERAL CONDITIONS

(See County Fermanagh Scheme, Section V., page 155).

COUNTY WESTMEATH.

TECHNICAL INSTRUCTION SCHEME.

1st August, 1913, to 31st July, 1914.

The Scheme, subject to the provision requiring a local contribution from the rates (see Finance), is applicable to all the Rural Districts within the administrative area of the County Council.

Population of the area administered under the Scheme, 52,514. Valuation, £316,304. Value of 1d. rate, £1,317.

The local contribution from the rates will be paid over to the Committee by the County Council in instalments in April and December, 1913.

County Committee of Agriculture and Technical Instruction.

The Committee was appointed on the 13th June, 1911, and will cease to hold office on the 1st June, 1914. It consists of fifty-seven members, of whom thirty-one are County Councillors, and twenty-six added members.

Chief Industries.

The chief industries in the rural districts of the County are agriculture and allied industries.

Objects of the Scheme.

The objects of the Scheme are to provide, by maintaining a Technical School at Mullingar, and by means of Itinerant Instructors and Scholarships, instruction in Technological, Commercial and Domestic Economy Subjects.

The Scheme is set out under the following heads:—

- I. Finance.
- II. Itinerant Instruction.
- III. Technical School, Mullingar.
- IV. Scholarships for Girls.
- V. General Conditions.

I. FINANCE.

A. Estimated Income:

(1) Contribution from the County Council, from rates levied in the financial year ending 31st March, 1914	£326
(2) Contributions from the Department:—	
(i) Annual Contribution from Endowment	£450
Less amount equal to one-half the grant earned under Section II. (b) of the Department's Programme for Technical Schools and Classes (see below)	50
	400

(ii) Grants under the Programme for
Technical Schools and
Classes :—

(a) Under Section II. (a) ..	£20	
(b) Under Section II. (b) ..	100	
		£120
(3) Contributions from the County Longford Joint Technical Instruction Committee for the services of Commercial Instructor		520
		60
Total		£900

B. Estimated Expenditure :

(1) Salary of one Instructor in Manual Work	£155
(2) Salary of two Instructresses in Domestic Economy ..	200
(3) Salary of Commercial Instructor	150
(4) Travelling and incidental expenses of Teachers ..	75
(5) Class Materials and Equipment Renewals	100
(6) Technical School, Mullingar	80
(7) Scholarships for Girls	195
(8) General Administration Account	80
Total	£1,035

C. Allocation of Accumulated Funds :

Of the funds remaining unexpended from the working of the Scheme in previous sessions, the sum of £120 will be appropriated to meet the estimated deficit on the working of the Scheme for the present academic year ; the remainder will be applied for such purposes as the Committee, with the approval of the Department, may, from time to time, determine.

II. ITINERANT INSTRUCTION.

(a) The subjects to be taught will include manual work in Wood, Commercial Subjects, Cookery, Laundry-work, Needlework, and Household Management, with Hygiene (if possible). The courses of instruction in Manual Work will, as a rule, extend over six weeks, or, where two centres can be taken concurrently, three months. In either case the courses will be so arranged as to secure at least thirty lessons for each of two classes at each centre.

(b) The centres for these courses will be selected by the Committee, on consideration of the applications from all eligible centres, at the beginning of the Session.

(c) In the case of the courses conducted by one of the Domestic Economy Instructresses, the Committee will rent a cottage in a populous district, preferably a district containing a number of labourers' cottages. The Instructresses will reside in the cottage and conduct classes on certain days weekly for a fixed period—say ten or twelve weeks. The cottage will be furnished with essentials only, and in keeping with the requirements of a cottage of its class. It will be managed so as to show how a household may be conducted on limited resources. The time of the Instructress which is not occupied in class-work as the cottage will be devoted to making house-to-house visits in the neighbourhood, with a view to affording such information on practical subjects as the circumstances of cases may suggest, special attention being given to practical demonstrations in the proper use of such utensils and food materials as are available in the majority of cottages.

The number of students admitted to a class held at the cottage in which the Instructress resides should not exceed eight or ten. The necessary furniture will be hired or purchased by the Committee.

(d) The salaries of Itinerant Teachers shall be paid monthly, and shall constitute a first charge on the funds of the Committee.

(e) Salaries, allowances, and conditions of employment of Itinerant Teachers are set forth generally in the Department's Circular Letter, No. 21.

III. TECHNICAL SCHOOL, MULLINGAR.

The Committee will provide suitable premises for permanent classes at Mullingar. Classes will be conducted in English, Mathematics, and Drawing of the Introductory Course; in Manual Work, Practical Mathematics, and Mechanical Drawing; in Commercial Subjects and Irish, and in Domestic Economy.

The classes will be under the general supervision of the Manual Instructor as headmaster, and his duties will be:—

1. To conduct classes at Mullingar on three nights in each week, in addition to classes at itinerant centres when not engaged at Mullingar.
2. To take general charge of the registration of students, and the arrangement of time-tables and classes in the Technical School, Mullingar.
3. To be responsible for the equipment of all classes in the Technical School.
4. To furnish monthly reports of the working of the Technical School to the County Committee.
5. To supply, through the Secretary to the County Committee, such information and returns as the Department may, from time to time, require.

A duly qualified teacher in subjects of the Introductory Course will be engaged by the Committee, and a sum of £25 is provided to defray the teacher's salary and other expenses incidental to the classes.

Classes in Commercial Subjects will be conducted by the Committee's teacher.

In order to encourage the attendance of suitable pupils at the Technical School, provision is made for the award of prizes.

IV. SCHOLARSHIPS FOR GIRLS.

The Committee will, in June, 1914, award a limited number of Scholarships to girls who have received an education equivalent to that of the Fifth Standard of a National School, to enable them to attend a regular course of instruction and training in Domestic Economy. The object of such Scholarships is to cultivate intelligence and resourcefulness on the part of those holding them, and to render them more practical in the performance of home duties of all kinds.

The Scholarships will be of the value of £15 each, and will be tenable at residential schools of domestic training recognised as suitable by the Department of Agriculture and Technical Instruction. Selected candidates will be required to pay a fee of £2 to the managers of the school on or before the date of entrance, and this sum, together with the amount of the Scholarship to be paid by the Committee to the school managers, will entitle the scholar to board, residence, and training for one academic year.

A. General Conditions regulating the award of the Scholarships.

- (1) The Scholarships will be tenable only by girls
 - (a) who are over sixteen and under twenty-five years of age on the 1st of June, 1914, and
 - (b) whose parents or guardians have been resident in the area administered by the Committee for at least one year immediately preceding the 1st of June, 1914.
- (2) The selection of the Scholars will be made by a Selection Committee of the County Committee.

(3) Forms of Application for Scholarships may be obtained from the Secretary to the Committee, and must be returned, duly filled in, by the 2nd of June. Each application must be accompanied by not less than two testimonials, one of which must be from a local clergyman, and one from a District or County Councillor.

(4) Selected candidates will be required to furnish, for the inspection of the County Committee, an authenticated copy of certificate of birth, and a certificate of sound health from a duly qualified medical practitioner.

(5) Selected candidates shall enter the Residential School for a fortnight on probation. Any candidates found unsuitable to undergo the course of training will, at the expiration of the period of probation, be required to leave, and their places shall be filled by selection from the other qualified candidates. The fee to the School Managers shall be refunded to those scholars who are required to leave the school under these conditions.

(6) The amount of the Scholarships will be paid to the Managers of the Schools in two half-yearly instalments, one on or about the 31st January, and the other on or about the 31st July. Payment of these instalments will be authorised by the Department on receipt of satisfactory reports from their Inspectors.

(7) All Scholarships shall terminate on the 31st July, 1915.

(8) The Committee may refuse to award the full number of Scholarships should a sufficient number of suitable candidates not be forthcoming, and they may determine a Scholarship at any time, without notice, upon being satisfied that its continuance is for any reason undesirable.

(9) In the case of difficulties arising in connection with the awarding or holding of these Scholarships, the matter will be referred to the Department, whose decision shall be final.

An advertisement of the Scholarship Scheme will be inserted once, early in the month of May, in the newspapers circulating within the area administered by the Committee.

B. Conditions Regulating the Recognition of Residential Schools of Domestic Training.

(1) In order that a Residential School of Domestic Training may be recognised by the Department under this Scheme, the Managers must provide a satisfactory course of instruction in the following subjects:—

- Household Management (including the keeping of accounts).
- Cookery (including the selection of menus for small incomes).
- Needlework (repairing, adapting, and dressmaking).
- Laundry-work.
- Hygiene (including sick nursing and the care of the young).

At least thirty hours per week must be devoted to the foregoing subjects.

The curriculum may also include one or more of the following subjects if adequate provision is made for both practical and theoretical instruction:—

- Dairy-work.
- Poultry-rearing.
- Bee-keeping.
- Horticulture.

(2) There must be on the staff of the School a certificated Teacher of Domestic Science, who devotes at least thirty hours per week to the instruction of residential pupils. If the number of pupils exceeds 18, there must be one such teacher for each 18, or fraction of 18, pupils.

(3) The School Managers must satisfy the Department that the dormitory accommodation, and other provisions, of the School are adequate and satisfactory.

(4) Within a fortnight after the re-opening of the School in any year, the Managers must forward to the Department the complete Time Table on Form S. 148, copies of which will be furnished by the Department upon

application. This Time Table will show the distribution of time to the various subjects of the course, and must receive the written approval of the Department.

(5) The School shall be at all times open to the Inspectors of the Department.

GENERAL CONDITIONS.

(See County Ferganagh Scheme, Section V., page 155.)

URBAN AND RURAL DISTRICTS OF BALLYMONEY.

TECHNICAL INSTRUCTION SCHEME.

1st August, 1913, to 31st July, 1914.

Chief Industries:—Farming and the industries connected therewith.

Population:—Urban District, 3,100; Rural District, 21,948; Total, 25,048.

Valuation:—Urban District, £8,245; Rural District, £60,794; Total, £69,039.

Value of 1d. rate:—Urban District, £34; Rural District, £337; Total, £371. The local contribution from the rates will be paid over to the Committee in instalments in October, 1913, and March, 1914.

Technical Instruction Committee.

The Committee was appointed on the 4th April, 1913, and will cease to hold office on the 31st December, 1915. It consists of sixteen members, of whom five are Urban District Councillors, three Rural District Councillors, two County Councillors, and six added members.

Objects of the Scheme.

The objects of the Scheme are to provide instruction in Science, Technological, Commercial and Domestic Economy Subjects for persons in the Urban and Rural Districts of Ballymoney.

Premises.

The Technical School is situated in Charles Street Ballymoney, and contains the following class-rooms:—Science Laboratory, Manual Workshop, Domestic Economy Room, two Class Rooms, two Teachers' Rooms. The Scheme is set out under the following heads:—

- I. Finance.
- II. Subjects of Instruction.
- III. General Conditions.

I. FINANCE.

A. Estimated Income:

(1) Contribution from the Urban District Council (the produce of a rate of 1d. in the £, levied in the financial year ending the 31st March, 1914)	£31
(2) Contribution from the Antrim County Council in respect of the Rural District (the produce of a rate of 1d. in the £ levied in the financial year ending the 31st March, 1914)	84
(3) Students' Fees	20
(4) Subscriptions to Scholarship and Prize Fund	16
(5) Contributions from the Department:—	
(i) From Endowment	£210
Less amount equal to one-half the grant earned under Section II. (b) of the Programme for Technical Schools, etc.	5
	£205

(ii) Grants under the Programme for Technical Schools, etc. :-				
(a) Under Section II (a), etc. ..	450			
(b) Under Section II (b) ..	10			
		460		665
(6) Sale of Books, Class Materials, etc.				10
(7) Rent for use of Rooms by external Schools ..				52
(8) Contributions from the Intermediate School in respect of the services of the Committee's Teachers of Manual Work and Domestic Economy				30
(9) Grant from the Commissioners of National Education, for instruction in Cookery to National School Pupils ..				35
Total				2192

B. Estimated Expenditure :

(1) Salary of Principal —	200
(2) Salaries of other Teachers	434
(3) Scholarships and Prizes	30
(4) Caretaker's Wages	28
(5) Fuel, Light, and Cleaning	45
(6) Insurance	7
(7) Interest on, and Repayment of, Loan	87
(8) Equipment (new and renewals)	10
(9) Class Materials	30
(10) Repairs to Premises, Grounds, etc.	15
(11) Printing, Stationery, Advertising, and Incidental Expenses	15
Total	£800

C. Allocation of Accumulated Funds :

The funds remaining unexpended from the working of the Scheme in previous sessions, together with the excess of receipts over expenditure, shown above, may be applied for such purposes as the Committee, with the approval of the Department, may, from time to time, determine.

II. SUBJECTS OF INSTRUCTION

Introductory Courses :

English, Mathematics, Elementary Science, Drawing, Domestic Economy.

Commercial Subjects :

Commercial Arithmetic, Commercial English, Shorthand, Book-keeping, Commercial Correspondence and Business Methods.

Languages :

French, German.

Mathematics :

Pure Mathematics, Practical Mathematics, Mensuration and Surveying, Practical Plane and Solid Geometry, Rural Mathematics, Calculations.

Science (Pure and Applied) :

Experimental Physics, Chemistry, Building Construction, Science of Common Life, Rural Economy, Household Chemistry, Woodworking Industries.

[179]

Handicraft :

Manual Instruction in Wood.

*Domestic Science :*Cookery, Laundry-work, Dressmaking, Needlework, Housewifery
Hygiene, First Aid, Sick Nursing.*Art Subjects :*Freehand Drawing, Model Drawing, Shading from a Cast, Plant.
Drawing, Geometrical Drawing.

III. GENERAL CONDITIONS.

(See County Fermanagh Scheme, Section V., page 155.)

BOROUGH OF CLONMEL.

TECHNICAL INSTRUCTION SCHEME.

1st August, 1913, to 31st July, 1914.

Chief Industries :

Condensed Milk and Butter-making, Brewing, Tanning, Boot and Shoemaking, Building, Road Carriage Building, Sheet Metal Working, Cabinet-making and Carving, Lace-making, Printing and Book-binding, Agricultural Implement Work.

Population, 19,209. Valuation, £19,471. Value of 1d. rate, £81.

The local contribution from Rates will be paid over to the Committee before the 31st August, 1913.

Technical Instruction Committee.

The Committee was appointed on the 23rd January, 1913, and will cease to hold office on the 23rd January, 1914. There are fifteen members, of whom three are Urban District Councillors, and twelve added members.

Objects of the Scheme.

The objects of the Scheme are to provide such courses of instruction in Science, Technology, Art, Domestic Economy, Handicraft, and Commercial work as will be useful to the students as individuals, and through the students, will help in the support and development of local industry.

Premises.

The Technical School is situated in Anglesea Street, and contains the following class-rooms :—Experimental Science, Laboratory, Art, Domestic Economy, Commercial (2 rooms), Forge, Engineering Workshop, Wood-Workshop, Paint Workshop.

The Scheme is set out under the following heads :—

I. Finance.

II. Subjects of Instruction.

III. Day Trades Preparatory School.

IV. General Conditions.

I. FINANCE.

A. Estimated Income :

(1) Contribution from Urban District Council (the produce of a rate of 1d. in the £, levied in the Urban District in the Financial Year ending 31st March, 1914)	£78
(2) Students' Fees	35
(3) Contributions from the Department :—	
(i) From Endowment	£635
Less one-half of amount of grant earned under Section II. (b) of the Programme for Technical Schools and Classes (see below)	25
	£500
(ii) Grants under the Programme for Technical Schools and Classes—	
(a) Under Section II. (a)	320
(b) Under Section II. (b)	50
(iii) Grant under the Programme for Day Secondary Schools in respect of instruction in the Day Trades Preparatory School	200
(iv) Grant in aid of the maintenance of the Day Trades Preparatory School (estimated)	363
	923
	£1,423
(4) Sales of Books, Class Materials, etc.	10
(5) From Extern Schools for part time services of Art Teacher	6
Total	£1,552

B. Estimated Expenditure .

(1) Salary of Principal and Secretary	£260
(2) Salaries of other Teachers	856 10s.
(3) Scholarships and Prizes	50
(4) Caretaker's Wages	15
(5) Fuel, Light, and Cleaning	75
(6) Rents and Insurance	53
(7) Equipment (new and renewals)	50
(8) Class Materials	55
(9) Printing, Stationery, and Advertising	27 10s.
(10) Salary of Assistant Secretary	20
(11) Repayment of Loans and Interest	79
Total	£1,541

NOTE.—The balance of the funds for the present academic year will be applied to meet the deficit incurred on the working of the Scheme in previous seasons, and for such other purposes as the Committee, with the approval of the Department, may, from time to time, determine.

II. SUBJECTS OF INSTRUCTION.

Introductory Course :

English, Mathematics, Drawing, Manual Work, Domestic Economy, Experimental Science.

Commercial Subjects :

Commercial Correspondence, Business Methods, Book-keeping, Shorthand, Typewriting, Commercial Geography, Commercial Arithmetic.

Languages :

Irish, French.

Mathematics :

Workshop Arithmetic, Practical Mathematics, Practical Geometry.

Science (Pure and Applied) :

Road Carriage Building, Carpentry and Joinery, Mechanical Engineering, Structural Engineering, Experimental Mechanics, Heat, Chemistry, Magnetism and Electricity, Building Construction, Motor Engineering.

Handicraft :

Wood-work, Metal-work, Glass-work, Leather-work, Lace-making.

Domestic Science :

Laundry-work, Cookery, Needlework and Dressmaking, Housewifery.

Art Subjects :

Freehand and Mechanical Drawing, Elementary Design, Drawing in Light and Shade, Perspective, Design applied to the requirements of Craft Work.

III. DAY TRADES PREPARATORY SCHOOL.

A Trades Preparatory School will be conducted at the Technical School, Clonmel. The aim of this school will be to provide for boys over the age of thirteen, who have received an education equivalent to that of the Sixth Standard of a National School, such a course of training as will fit them to enter upon an industrial career.

The course of instruction shall extend over a period of three years, and will include Experimental Science, Drawing, Workshop Mathematics, Manual Instruction, Practical Geometry, and Literary Subjects, including one Modern Language besides English.

The Department will bear three-fourths of the approved net annual cost of maintaining the school. The proportion of the expenses admitted for payment by the Department may be increased by one-tenth if, in the opinion of the Department's Inspectors, the organisation and teaching merit special recognition, or it may be reduced by one or more tenths if the organisation or teaching is, in the opinion of the Department's Inspectors, unsatisfactory.

IV. GENERAL CONDITIONS.

(See County Fermanagh Scheme, Section V., page 165.)

URBAN DISTRICT OF RATHMINES AND RATHGAR.

TECHNICAL INSTRUCTION SCHEME.

1st August, 1913, to 31st July, 1914.

Chief Industries.

Linen weaving, commercial pursuits, laundry-work.
 Population, 38,180. Valuation, £185,072. Value of 1d. rate, £771.
 The local contribution from rates will be paid over to the Committee before the close of the financial year ending 31st March, 1914.

Technical Instruction Committee.

The Committee was appointed on the 22nd January, 1911, and will cease to hold office on the 23rd January, 1914. It consists of fifteen members, of whom nine are Urban District Councillors, and six added members.

Objects of the Scheme.

The objects of the Scheme are to provide instruction in commercial subjects, and in Domestic Science.

Premises.

The Municipal Technical Institute is situated in Leicester Road, Rathmines.

The Scheme is set out under the following heads:—

- I. Finance.
- II. Subjects of Instruction.
- III. General Conditions.

I. FINANCE.

A. Estimated Income:

(1) Contribution from the Urban District Council (the produce of a rate of 1d. in the £ levied in the financial year ending 31st March, 1914)	£771
(2) Contributions from the Department:—	
(a) From Endowment	£1,250
Less amount equal to one-half of grant earned under Section II. (b) of the Programme for Technical Schools, etc.	25
(£) Grants under Programme for Technical Schools, etc.	
(a) Under Section II. (a)	£600
(b) Under Section II. (b)	50
	650
(3) Students' Fees	£1,875
	300
Total	£3,946

B. Estimated Expenditure :

(1) Interest and Sinking Fund on Loan	2500
(2) Salary of Principal	434
(3) Salary of Head Mistress of Domestic Economy Department	110
(4) Salary of Instructors in Domestic Economy	90
(5) Salaries of other Teachers	1,151
(6) Examinations, Prizes, &c	40
(7) Caretaker's Wages	52
(8) Wages of Domestic Economy Attendants	55
(9) Fuel, Light and Cleaning	102
(10) Insurance	10
(11) Equipment (including Addition to Library)	20
(12) Class Materials	72
(13) Repairs to Premises	5
(14) Administrative and incidental Expenses :—	
(a) Secretary's Salary	150
(b) Salary of Clerk	75
(c) Office Expenses (including Postage and Telephone)	20
(d) Deputation Expenses	10
(e) Printing, Stationery and Advertising	150
(f) Sundries	10
	<hr/>
	315
Total	<hr/>
	£2,945

II. SUBJECTS OF INSTRUCTION.**(1) SCHOOL OF COMMERCE.***Introductory Course :*

English, mathematics and drawing.

Commercial Subjects :

Shorthand, typewriting, book-keeping, correspondence, business methods, office routine, commercial arithmetic.

Languages :

French, German.

Mathematics :

Advanced arithmetic and algebra.

Higher Commercial Subjects :

Advanced business methods (home foreign, import and export trade), accountancy, company procedure and accounts, auditing, economics, commercial geography, commercial law, banking and finance, railway and insurance work and practice.

(2) SCHOOL OF DOMESTIC ECONOMY.

Cookery, laundry-work, needlework, housewifery, hygiene.

III. GENERAL CONDITIONS.

(See Section V., Scheme for County Fernmanagh, page 155).

**CONDITIONS OF AWARD OF SCHOLARSHIPS OFFERED FOR
COMPETITION BY THE DEPARTMENT.**

Under Revision.

Form S. 2.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN.

METROPOLITAN SCHOOL OF ART, DUBLIN.

TEACHERSHIPS-IN-TRAINING, 1913.

The Department will offer for competition, at the beginning of the Session 1913-14, three Teacherships-in-Training tenable at the Metropolitan School of Art, Dublin. One will be open to competition amongst male candidates only, and one amongst female candidates only; the third will be open to competition amongst both male and female candidates.

The object of the Teacherships-in-Training is to encourage capable Art students to undertake such a course of training as will enable them to become Art Teachers.

The Teacherships-in-Training will entitle the holders to free admission to all the day and evening classes at the Metropolitan School of Art for the Session 1913-14; a maintenance allowance of £1s. per week during the Session (about forty weeks); and third-class railway fare for one journey to and from Dublin.

The Teacherships will be awarded partly as the result of an examination, and partly for works submitted according to the conditions stated below.

The examination will be confined to Art subjects, and will be held at the Metropolitan School of Art, Dublin, on Tuesday, Wednesday, and Thursday, the 24th, 25th, and 26th June, 1913.

Candidates must themselves bear any expenses incurred by them in connection with attendance at the examination.

Candidates who have held Scholarships at the Metropolitan School of Art extending over more than one School Session will not be eligible for the award of Teacherships-in-Training.

Teacherships will not be awarded to candidates who do not show in the course of the examination that they are capable of taking full advantage of the instruction provided at the Metropolitan School of Art, and in particular, candidates with physical defects of voice, sight, or hearing, will not be regarded as eligible. In awarding the Teacherships preference will be given to candidates who possess the Art Class Teachers' Certificate (Board of Education), or the Irish Secondary Teachers' Honours Drawing Certificate.

The award will be made on the following conditions:—

(1.) Candidates must be not less than eighteen and not more than thirty years of age on the 1st September, 1913. The Department may allow a modification of this rule in special cases.

(2.) Successful candidates will be required to furnish a medical certificate of health, an authenticated copy of certificate of birth, and satisfactory testimonials from two responsible persons.

(3.) Candidates must satisfy the Department that they have had a good general education.

(4.) Candidates must have been born in Ireland, or have been resident in Ireland for three years prior to the 1st September, 1913.

(5.) Successful candidates will be required to prepare, in conjunction with the Headmaster of the School, a scheme of study; and to submit it for the Department's approval. They will be required to devote their whole time to the work of this scheme; to attend regularly and punctually, and generally to comply with the regulations set out in the programme of the Metropolitan School of Art. They must be prepared, if required, as

part of their training, to undertake such work as teachers as the Headmaster may prescribe.

(6.) The Teacherships may be renewed for a second Session. Renewal will depend upon the ability and application shown by the student during the previous Session, and on the scheme of study proposed by the student when applying for a renewal for a second Session.

(7.) The Department reserve the right at any time to determine, without notice, any Teachership upon being satisfied that its continuance is for any reason undesirable.

(8.) The decision of the Department in all questions arising in connection with Teacherships shall be final.

(9.) The Department do not undertake to employ Teachers, nor to find employment for them, at the close of the period of training.

Applications for admission to the competition must be forwarded, on Form S. 3, so as to reach the Offices of the Department not later than the 30th April, 1913. Applications for forms are not regarded as applications for admission to the examination. Only those candidates who present an official card of admission will be admitted to the examination room.

Copies of Form S. 3 may be obtained, after 1st February, 1913, upon application to the Secretary, Department of Agriculture and Technical Instruction for Ireland, Upper Merrion Street, Dublin, or to the Registrar, Metropolitan School of Art, Kildare Street, Dublin.

SUBJECTS OF EXAMINATION.

The subjects and time-table of the examination will be:—

First Day, Tuesday, June 24th—

10 a.m. to 2 p.m.—Drawing of a Figure from the Antique. (100 marks).

3 to 5.30 p.m.—Object Drawing. (50 marks.)

Second Day, Wednesday, June 25th—

10 a.m. to 1 p.m.—Drawing from a Cast. (50 marks.)

3 to 6 p.m.—Design (Drawn or Modelled). (100 marks.)

Third Day, Thursday, June 26th—

11 a.m. to 1.30 p.m.—Principles of Ornament. (100 marks.)

3.30 to 4.30 p.m.—History of Art, having special reference to the craft for which the exercises in Design have been worked. (50 marks.)

4.45 to 5.45 p.m.—Drawing on the Blackboard. (50 marks.)

FINISHED STUDIES.

In order to encourage Art students to devote attention to what should be the primary aim of their higher instruction, namely, the application of their skill, experience, and good taste to finished studies requiring more time and care than the ordinary conditions of an examination room permit, marks, to a maximum of 225, will be awarded for four works of a similar character to those proposed for the Art Teachers' Certificate. (See Form S. 240).

Works to be submitted for the competition must be delivered at the Metropolitan School of Art, Dublin, on or before Saturday, the 21st June, 1913. They should be addressed, "The Registrar, Metropolitan School of Art, Dublin," and should be specially marked, "Works, Teacherships-in-Training."

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,
UPPER MERRION STREET, DUBLIN.

ROYAL COLLEGE OF SCIENCE, DUBLIN.

SCIENCE AND TECHNOLOGICAL SCHOLARSHIPS, 1914.

A limited number of Scholarships and of Teacherships-in-Training, tenable at the Royal College of Science, Dublin, will be offered for competition among Students of Science and Technology in 1914.

The Scholarships are of the value of £50 per annum and, in addition, entitle the holder to free instruction during the Associate Course, and third-class railway fare for one journey each session to and from Dublin.

A Teachership-in-Training entitles the holder to free instruction during the Associate Course, a maintenance allowance of 21s. per week for the session of about forty weeks each year, and third-class railway fare for one journey each session to and from Dublin.

The Associate Course extends over four years, and the College Session lasts from the beginning of October until the end of June each year.

Candidates awarded Teacherships-in-Training will be required to enter into an undertaking that they will pursue the full Associate Course, with a view to becoming Teachers of Science in Ireland, and that, in the event of their leaving the College before obtaining the Diploma of Associateship, they will refund to the Department the sums paid to them as maintenance allowances and expenses of travelling.

Holders of Scholarships and Teacherships-in-Training will be required to devote their whole time to the work of the Associate Course, to comply with the Regulations of the College, and to pass the examinations required for the Associateship. The continuance of the Scholarship or Teachership-in-Training from session to session will depend upon the ability and application which the Student has shown during the previous session or sessions at the College.

Holders of Scholarships and Teacherships-in-Training who may seek leave of absence from attendance at the College in order to attend examinations for Scholarships in other Institutions, will be required to pay first the College Fee for the current term.

Candidates for Scholarships and Teacherships-in-Training must be not less than sixteen nor more than thirty years of age on the 1st June, 1914. Holders of Royal Scholarships (or, under former regulations, Royal Exhibitions or National Scholarships), awarded by the Board of Education, London, and present or past Students of the Royal College of Science, are ineligible as candidates.

Candidates must have been born in Ireland, or have been resident in Ireland for three years immediately prior to the 1st June, 1914.

Candidates will have to satisfy the Department as to their knowledge of English and of one other language (Greek, Latin, Irish, French, or German). In these subjects a pass in the Senior Grade of the Intermediate Education Board's Examinations, or the equivalent of this, will be accepted as satisfactory. Those candidates who cannot thus satisfy the Department as to their knowledge of the qualifying subjects will be examined on the syllabuses prescribed for the Entrance Examination to the Royal College of Science.

The competition will be confined to Mathematics, Experimental Science, and Drawing.

The Syllabus in Mathematics will be the Honour Courses in Arithmetic with Algebra, Geometry, and Trigonometry for the Senior Grade of the Intermediate Education Board's Examinations of 1914.

In Experimental Science, candidates will be allowed the choice of one of the following subjects of the Special Courses of Experimental Science of the Department's Programme for Day Secondary Schools:—Physics,

[187]

Chemistry, Mechanics, Botany, Physiology and Hygiene, Physical and Commercial Geography. The papers set may, however, include questions on the work of the Two Year Preliminary Course.

The Syllabus in Drawing will be the First and Second Year Syllabuses of the Programme for Day Secondary Schools.

NOTE.—Text Books, other than those referred to in the Syllabuses, are not prescribed for the examinations.

The examination will be held in Dublin on the days and at the hours shown below :—

Tuesday, 30th June.—Greek, Latin, Irish, French or German, 2 p.m. to 5 p.m.

Wednesday, 1st July.—Mathematics (First Paper), 10 a.m. to 1 p.m.
Experimental Science (Written Examination), 2 p.m. to 5 p.m.

Thursday, 2nd July.—Mathematics (Second Paper), 10 a.m. to 1 p.m.; Experimental Science (Practical Examination), 2 p.m. to 5 p.m.

Friday, 3rd July.—Drawing, 10 a.m. to 1.15 p.m.; English, 2 p.m. to 5 p.m.

(These dates are subject to alteration.)

Candidates must themselves bear any expenses incurred by them in connection with attendance at the examination.

Scholarships or Teacherships-in-Training will not be awarded to candidates who do not show in the course of the examination that they are capable of taking full advantage of the instruction provided at the Royal College of Science. Candidates with physical defects of voice, sight, or hearing, will not be regarded as eligible for Teacherships-in-Training.

Successful candidates will be required to furnish a Medical Certificate of Health, an authenticated copy of Certificate of Birth, and satisfactory testimonials from two responsible persons.

The Department reserve the right at any time to determine without notice a Scholarship or Teachership-in-Training, upon being satisfied that its continuance is for any reason undesirable.

The decision of the Department in all questions arising in connection with the Scholarships and Teacherships-in-Training shall be final.

The Department do not undertake to employ Teachers, nor to find employment for them, at the close of the period of training.

Applications for admission to the examination must be made not later than the 30th April, on Form S. 34, copies of which may be obtained upon application to the Secretary, Department of Agriculture and Technical Instruction for Ireland, Upper Merrion Street, Dublin, or to the Registrar, Royal College of Science, Upper Merrion Street, Dublin.

Applications received after the 30th April will be too late for consideration. Applications for Forms are not regarded as applications for admission to the examination. Only those candidates who present an official card of admission will be permitted to attend the examination.

Under Revision.

Form S. 194.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND
UPPER MERRION STREET, DUBLIN.

COMMERCIAL SCHOLARSHIPS, 1912.

The Department will, in September, 1912, award a limited number of Commercial Scholarships (not more than six) to young men who have had a sound general education, and some commercial experience.

The object of the Scholarships is to afford facilities for the Holders to obtain training in some higher Institution, approved by the Department, with a view to their employment as teachers of Commercial Subjects in Ireland.

The Scholarships are of the value of £100 per annum each, and are tenable for two years. The Department, however, reserve the right to determine a Scholarship at any time within this period upon being satisfied that its continuance is for any reason undesirable.

The Scholarship-holders will be selected by the Department on consideration of the qualifications and experience of the applicants.

Candidates must be at least twenty-one years of age on the 1st September, 1912, and must have been born in Ireland, or have been resident in Ireland for three years immediately preceding the 1st September, 1912.

Successful candidates will be required to enter into an undertaking that they will engage in the teaching of Commercial subjects after the termination of their Scholarships.

Certificates of good character will be required from all applicants, and candidates selected for Scholarships will be required to produce a medical certificate of health and an authenticated copy of certificate of birth.

The decision of the Department in regard to the selection of candidates or to any other question arising out of these Scholarships, will be final.

Candidates must fill in Form S. 193, and return it to the Secretary of the Department not later than the 31st August, 1912. Copies of this Form may be had on application.

Under Revision.

Form S. 194.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND
UPPER MERRION STREET, DUBLIN.

TRAINING OF TEACHERS OF CROCHET-WORK AND SPRIGGING.

The Department will, in September, 1913, award not more than three Scholarships, tenable at the Training School for Lace and Sprigging Teachers, Enniskillen, to girls having a satisfactory general education, and some proficiency in Crochet-work or Sprigging.

These Scholarships are granted to enable the holders to secure training as teachers of Crochet-work or Sprigging.

The Scholarships will be of the value of £25 each, and will be tenable for one year. The Department reserve the right to determine a Scholarship at any time upon being satisfied that its continuance is for any reason undesirable.

Each candidate for a Scholarship will be required to submit to the Department, with the form of application, specimens of her work in either Crochet-work or Sprigging.

Should the work submitted be regarded as of a satisfactory standard, the candidate will be admitted to an examination which will consist of simple tests in English, Arithmetic, Drawing, and Crochet-work or Sprigging.

The Scholarship will be awarded as a result of the examination. (Not more than one Scholarship will be awarded in the case of candidates from any one County.)

The examination will be held at the Metropolitan School of Art, Dublin, and at the Technical School, Enniskillen, on the following dates:—

Dublin: Crochet-work or Sprigging, on Tuesday, 9th September.

English, Arithmetic and Drawing, on Wednesday, 10th September.

Enniskillen: English, Arithmetic and Drawing, on Wednesday, 10th September.

Crochet-work or Sprigging, on Thursday, 11th September.

Candidates will be required to defray their own expenses in attending the examination.

Candidates must be at least 20 years of age on the 1st September, 1912, and must have been born in Ireland or have resided in the country for three years immediately preceding that date.

Two certificates of good character will be required from all applicants, and selected candidates will be required to produce a medical certificate of health and an authenticated copy of certificate of birth.

The decision of the Department in regard to the selection of candidates or to any other question arising out of these Scholarships will be final.

Application must be made not later than the 21st August on Form 197, copies of which may be had from the Secretary, Department of Agriculture and Technical Instruction for Ireland, Upper Merrion Street, Dublin. (Two specimens of finished work, and two specimens of work in progress must accompany such application.)

Only those applications received at the Office of the Department by Friday, August 22nd, 1913, will be taken into consideration.

RESULTS OF COMPETITIONS FOR SCHOLARSHIPS OFFERED BY THE DEPARTMENT DURING 1913.

SCIENCE AND TECHNOLOGICAL SCHOLARSHIPS AND TEACHERSHIPS-IN-TRAINING.

At the Annual Examination held on the 24th, 25th, 26th and 27th June, 1913, for Science and Technological Scholarships and Teacher-ships-in-Training, tenable at the Royal College of Science, Dublin, thirty-six candidates presented themselves.

Five Scholarships and five Teacher-ships-in-Training were offered for competition, and these were awarded to the following candidates, whose names are given in order of merit:—

Scholarships.

- Mr. Ernest F. Bates, Mountjoy School, Dublin.
Miss Elizabeth A. Gilmore, Municipal Technical School, Ballymena.
Mr. Patrick J. Hayes, Christian Brothers' Schools, North Richmond Street, Dublin.
Mr. John J. Moore, Christian Brothers' Schools, Cork.
Mr. Peter Whelan, Christian Brothers' Schools, Cork.

Teacher-ships in Training.

- Mr. John Carson, The Academy, Ballymena.
Mr. Henry G. Becker, St. Mary's College, Rathfriland.
Mr. Albert V. Henry, The Academy, Ballymena.
Mr. Robert McIntyre, The Academy, Ballymena.
Mr. William Gallaher, Christian Brothers' Schools, Fermoy.

TEACHERSHIPS-IN-TRAINING AT THE METROPOLITAN SCHOOL OF ART.

At the Examination held on the 24th, 25th and 26th June, 1913, for Teacher-ships-in-Training at the Metropolitan School of Art, eleven candidates presented themselves.

Three Teacher-ships-in-Training were offered for competition, and were awarded to the following candidates:—

- Miss Margaret M. O'Keefe, of Wexford.
Miss Gertrude M. O'Flynn, of Limerick.
Mr. Patrick J. Tushy, of Dublin.

COMMERCIAL SCHOLARSHIPS.

Five Scholarships were awarded in 1912, and of these four were held during the Session 1912-13. The holder of the remaining Scholarship was allowed by the Department to complete his studies during the Session 1912-13 for the Bachelor of Commerce Degree of the National University of Ireland, and he has now taken up the Scholarship. Three of the four Scholarships held during 1912-13 have been renewed for the Session 1913-14, the holder of the fourth Scholarship has taken up a temporary appointment as Commercial Teacher under the County Tipperary (Joint Urban and Rural) Technical Instruction Committee, for the Session 1913-14. These Scholarships are being held at the London School of Economics and Political Science (University of London).

SCHOLARSHIPS IN CROCHET-WORK AND SPRIGGING.

Twelve candidates competed for the three Scholarships offered for the purpose of training Teachers of Crochet-work and Sprigging, which were awarded as follows:—

Scholarships in Crochet Work.

- Miss Christina Redmond, of Ballyry, Co. Cork.
Miss Elizabeth McCurry, of Carrick-on-Shannon.

Scholarships in Sprigging.

- Miss Maggie Gallagher, of Killybegs, Co. Donegal.

The Scholarships are tenable for one year at the Training School for Lace and Sprigging Teachers, Enniskillen.

[191]

TABLE showing by COUNTIES the AMOUNTS ALLOCATED, &c.—continued.

Names of Counties, Urban Districts and Census Boroughs.	Contribution from Local Rates.	CONTRIBUTIONS FROM THE DEPARTMENT.		
		From Endowment.	(a) From other Sources.	Total.
MUNSTER.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
COUNTY CLARE: } Eiris Urban District, Kilrush "	535 8 4	756 1 3	387 17 8	582 16 8
COUNTY COKE: } Coomshingaugh Urban District, Ferryglash " " Kinsale " " Marazion " " Mallow " " Midleton " " Schinrone " " Youghal " "	2,388 2 4	1,548 9 10	1,288 0 0	5,224 9 12
Queenstown " "	85 0 9	373 8 11	545 2 6	918 2 7
CORK COUNTY BOROUGH: .	201,433 5 8	80,377 18 1	4,783 18 2	5,841 16 8
COUNTY KERRY: } Kilgarney Urban District, Lisowen " "	403 18 9	878 9 11	389 3 11	1,257 8 10
Trillick " " "	125 2 8	603 10 8	671 18 8	857 2 4
COUNTY LIMERICK: .	218 0 8	842 17 9	180 2 2	582 9 11
LIMERICK COUNTY BOROUGH: .	10,284 18 10	201,144 5 11	1,711 10 7	2,866 18 8
COUNTY TIPPERARY (NORTH RIDE): } Newry Urban District, Templemore " " Thurles " "	507 17 11	630 8 5	262 1 4	515 10 8
COUNTY TIPPERARY (SOUTH RIDE): } Carrick-on-Shannon Urban District, Oulart " "	400 15 18	418 18 8	152 0 8	585 10 9
Clonmel " "	18 0 7	481 14 18	700 15 9	1,351 18 7
TIPPERARY Joint Urban and Rural District, .	271 18 10	403 2 5	160 8 6	545 4 0
COUNTY WATERFORD: } Dungarvan Urban District,	574 18 0	477 7 4	84 10 8	551 18 0
WATERFORD COUNTY BOROUGH: .	10,175 5 7	2,425 18 9	1,051 16 0	1,527 18 9
Totals for Munster, .	7,380 2 5	11,538 8 8	11,786 18 13	32,144 5 1

(a) The attendance Grants payable in respect of the Session 1912-13 not having been fully determined, the Grants for the Session 1911-12 have been included under this head.
(b) Contributions for the financial year ended 31st March, 1913.

TABLE showing by COUNTIES the AMOUNTS ALLOCATED, &c.—continued.

Names of Counties, Urban Districts and County Boroughs.	Contribution from Local Rates.	Contributions from the Department		
		From Endowment	(a) From other Sources.	Total
ULSTER.				
COUNTY ANTRIM:				
Ballyclare Urban District,	409 0 5	479 13 11	460 10 3	937 10 7
Portrush ..				
Ballymena ..	150 9 4	491 12 5	1,373 9 9	1,966 9 2
Ballymoney Joint Urban and Rural District,	114 12 0	293 0 5	370 1 4	739 10 7
Carrickfergus Urban District, Leahe ..	58 17 8	6,350 5 4	345 0 0	6,345 5 4
	169 11 10	345 0 0	345 0 0	739 10 7
DELMONT COUNTY BOROUGH:	606,134 0 0	601,466 3 0	6,347 3 1	31,542 11 10
COUNTY ARMAGH:				
Armagh Urban District,	100 0 0	6,742 11 0	154 10 7	397 8 4
Lurgan ..	46 31 10	349 0 5	215 17 4	561 17 0
Portadown ..	119 8 9	6,563 10 0	6,480 0 0	1,022 10 5
	119 0 0	433 18 1	1,302 10 9	1,560 8 1
COUNTY DUBLIN:				
Carman Urban District, Castlehill ..	291 7 1	906 18 4	222 7 5	314 5 2
DR. DOWDALL:				
Levensham Urban District,	310 18 8	422 3 0	447 10 0	630 15 9
COUNTY DUBLIN:				
Blackbridge Urban District	760 0 0	723 9 0	307 12 5	460 1 10
Dunfermway ..	25 14 0	218 7 10	271 13 10	490 1 8
Dunfermway ..	321 0 0	352 3 2	315 2 9	247 11 11
Dunfermway ..	50 0 0	31 9 7	45 15 0	144 10 2
Dunfermway ..	24 5 10	191 12 9	40 1 0	261 13 5
Dunfermway ..	140 0 0	279 10 7	318 0 0	397 10 7
Dunfermway ..	27 3 0	6,664 15 3	254 10 4	900 5 0
Dunfermway ..	27 2 5	34 10 9	69 4 12	100 13 6
COUNTY DUBLIN:				
Enniscorthy Urban District,	400 0 0	955 10 7	327 10 0	633 15 7
COUNTY DUBLIN:				
Levensham Urban District,	444 0 4	435 13 4	561 2 2	1,310 14 0
Coleraine ..	105 0 0	801 6 7	440 10 11	620 2 9
LONGFORD COUNTY BOROUGH:	6,420 0 0	6,111 9 10	1,328 15 10	2,740 0 0
COUNTY MONAGHAN:				
Carrickmacross Urban District, Castledwyer ..	321 0 8	375 0 7	190 11 1	371 0 8
Carrickmacross ..				
Monaghan ..				
COUNTY TIRONE:				
Castletown Urban District, Dungannon ..	569 7 0	703 3 1	661 4 4	1,044 7 0
Dungannon ..				
Strabane ..				
Totals for Ulster.	11,741 10 8	21,738 5 3	16,233 11 2	41,550 10 9

(a) The attendance grant, payable in respect of the Session 1912-13, not having been fully determined, the grants for the Session 1911-12 have been included under this head.

(b) Includes a special grant of £100.

(c) Contributions for the financial year ended 31st March, 1913.

(d) Includes a special grant of £200.

(e) Includes contributions of £100 14s. and £100 12s. 3d., respectively, towards a separate scheme for girls.

(f) Includes a special grant of £380.

[193]

TABLE showing by COUNTIES the AMOUNTS ALLOCATED, &c.—continued.

Names of Counties, Urban Districts and County Boroughs	Contribution from Local Rates	CONTRIBUTIONS FROM THE DEPARTMENT.		
		From Endowment	(a) From other Sources	Total
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
CORNAUGHT.				
COUNTY GALWAY: }				
Ballinasloe Urban District, }	405 2 0	405 2 8	431 12 2	1,356 14 10
Galway " }	261 1 8	(b) 555 16 6	327 19 8	1,135 15 2
COUNTY LEITRIM: . .	154 12 7	310 17 10	275 4 5	459 2 5
COUNTY MAYO: }				
Ballina Urban District, }	424 12 8	639 2 7	243 14 11	876 17 8
Castlebar " }				
Westport " }				
COUNTY ROSCOMMON: .	390 0 0	(c) 427 5 1	195 3 9	652 11 10
COUNTY SLIGO: . .	320 0 0	177 14 9	164 10 5	543 5 2
Sligo Urban District, .	80 0 0	204 9 6	743 14 3	1,225 3 11
Totals for CORNAUGHT,	2,415 9 8	3,586 10 11	5,287 19 9	5,515 10 8
TOTALS FOR LEITRIM, .	10,915 4 4	11,538 9 5	9,045 1 11	39,371 11 4
TOTALS FOR MURPHY, .	7,160 2 8	11,358 9 2	11,795 15 11	31,264 5 1
TOTALS FOR ULSTER, .	11,751 10 5	14,725 5 8	19,823 11 3	41,699 16 6
TOTALS FOR CORNAUGHT, .	2,415 9 8	3,586 10 11	5,287 19 9	5,515 10 8
TOTALS FOR IRELAND, .	32,383 6 8	37,543 15 0	42,258 5 10	109,954 2 10

(a) The attendance grants payable in respect of the Session 1912-13 not having been fully determined the grants for the Session 1911-12 have been included under this head.

(b) Includes a Special Grant of £260.

(c) Includes a Special grant of £74.

TABLE

LIST OF TECHNICAL SCHOOLS AND CLASSES, showing the Grants under the the Department during the Financial Year, 1st April, 1912 Year, 1st August, 1911—31st July, 1912.

School No.	Name of School.	Classes conducted under Section II. (a), of the Programme						
		No. of Students in respect of whom grants were paid.						Grant.
		Introductory Course.	Specialised Courses.				Total Number of Students.	
			1st yr.	2nd yr.	3rd yr.	4th and subsequent years.		
LEINSTER.								
CO. CARLOW.								
6417	Carlow Technical Classes,	—	—	—	—	—	—	£ s. d.
—	Tullow Rural Science Class,	—	—	—	—	—	—	—
6418	Tullow Technical Classes,	—	—	—	—	—	—	—
—	— Biscuit Instruction,	—	—	—	—	—	—	—
CO. DUBLIN.								
7006	Ballsbridge: Royal Veterinary College of Ireland,	—	65	65	—	—	—	800 5 7
6611	Ballsbridge: Technical School,	—	4	41	12	5	1	84 16 4
6609	Blackrock: Dominican Convent, Nth. Hill,	—	19	25	15	0	3	151 3 2
6608	Blackrock: Municipal Technical School,	—	—	—	—	—	—	—
6607	Cable: St. Mary's Dominican Convent,	—	—	—	—	—	—	—
6181	Ringtown: Municipal Technical School,	—	4	22	41	22	6	253 7 10
6426	Trillick: School of Commerce,	—	42	175	38	15	2	346 11 10
6426	Trillick: School of Bookbinding,	—	—	7	13	1	12	129 27 0
6441	Ringwood: Pembroke Technical School,	—	—	57	16	5	2	276 0 19
CO. DUBLIN OF DUBLIN.								
6189	Alexandra College: School of Housecraft and Domestic Science,	—	—	—	—	—	—	—
6186	Christina Brothers' School, Nth. Richmond Street,	—	—	—	—	—	—	—
6143	Christian Brothers' Training College, Marine,	—	—	—	—	—	—	—
6010	City of Dublin Technical Schools,	30	620	75	21	0	78	1,087 14 1
7941	Dental School of the Incorporated Dental Hospital for Ireland,	—	—	20	20	—	—	294 4 3
7015	Leinster College of Irish,	—	—	—	—	—	—	—
7015	School of Surgery, Royal College of Surgeons,	—	—	81	105	—	—	730 16 7
CO. KILDARE.								
—	Atty: Rural Science Class,	—	—	—	—	—	—	—
6783	Atty: Technical School,	—	4	19	1	—	1	79 6 2
—	May: Rural Science Class,	—	—	—	—	—	—	—
6442	May: Technical School,	—	7	19	—	—	3	58 13 1
—	— Biscuit Instruction,	—	—	—	—	—	—	—
CO. KILKENNY.								
6097	Kilkenny: City Technical School,	—	5	28	5	2	3	120 14 5
—	— Biscuit Instruction,	—	—	—	—	—	—	—
KING'S COUNTY.								
6895	May: Technical School,	—	2	21	1	—	7	44 9 6
6896	Tullamore: Technical School,	—	4	27	—	—	2	15 3 2
—	— Biscuit Instruction,	—	—	—	—	—	—	—
CO. LONGFORD.								
—	— Biscuit Instruction,	—	—	—	—	—	—	—
CO. LOUTH.								
6416	Downside: Municipal Technical School,	—	91	45	17	12	10	321 11 4
6415	Downside: Municipal Technical School,	—	14	71	19	4	1	277 1 1
—	— Biscuit Instruction,	—	—	—	—	—	—	—
CO. MEATH.								
6254	Nasau: Technical School,	—	1	17	7	—	2	53 10 0
—	— Biscuit Instruction,	—	—	—	—	—	—	—
QUEEN'S COUNTY.								
6917	Mayborough: Technical School,	—	5	19	6	—	1	18 10 1
—	— Biscuit Instruction,	—	—	—	—	—	—	—

TABLE II.—LIST OF TECHNICAL SCHOOLS

[illegible]

TABLE II.—LIST OF TECHNICAL

School No.	Name of School.	Classes conducted under Section II. (a) of the Programme						
		Introductory Courses.	No. of Students in respect of whom grants were paid.					Grant.
			Specialised Courses.					
			1st yr.	2nd yr.	3rd yr.	4th and subsequent years.	Students attending laboratory classes.	
MUNSTER con.—								
								£ s. d.
6036	Co. ROSSIGNOL OF LIMERICK: Municipal Technical Institute	56	73	44	16	7	11	476 1 2
6061	Municipal School of Commerce,	—	55	13	10	2	10	111 10 11
	Co. TARRANT:							
6032	Carroll-on-Hill: Technical School,	—	3	9	1	—	—	22 3 6
6033	Carroll: Technical Classes,	16	47	22	4	7	9	209 0 9
6034	Carroll: Technical School,	—	—	—	—	—	1	9 10 10
6036	Carroll: Technical School,	22	7	3	2	1	1	107 17 11
6037	Carroll: Technical School,	—	—	—	—	—	—	20 10 7
6038	Carroll: Presentation Convent,	—	14	9	1	—	5	79 14 4
6039	Carroll: Technical Classes,	—	—	—	—	—	—	—
6040	Carroll: Technical School,	16	22	2	4	—	2	71 7 7
	— Bazaar Instruction, (Tipperary Urban and Rural Districts)	—	—	—	—	—	—	—
	— (North Riding)	—	—	—	—	—	—	—
	— (South Riding)	—	—	—	—	—	—	—
	Co. WATERFORD:							
6039	Dunraven: Technical School,	—	4	—	—	—	4	15 10 8
6041	Lismore: Technical School,	—	1	1	1	—	3	6 10 7
	— Bazaar Instruction	—	—	—	—	—	—	—
6047	Co. BERKHAMPTON OF WATERFORD: Central Technical Institute,	9	74	37	4	2	9	375 2 2
6116	Christian Brothers' School, Mount Glen,	—	—	—	—	—	—	—
6048	Dr La Salle Training College,	—	—	—	—	—	—	—
6079	Urgence Convent, Higher School of Domestic Economy,	—	—	—	—	—	—	—
	TOTALS FOR MUNSTER,	350	353	115	35	63	161	4,018 16 10
ULSTER.								
	Co. ANTRIM:							
7009	Antrim: Technical School,	7	27	36	—	—	2	106 5 10
7010	Ballymena: Technical School,	1	61	45	—	—	5	190 0 2
6043	Ballymena: Municipal Technical School,	25	149	45	13	11	49	371 18 9
6044	Ballymena: Technical School,	16	60	100	19	19	26	430 5 3
6045	Carroll: Technical School,	25	51	32	14	9	9	215 5 3
6046	Larne: Technical School,	9	79	50	2	2	27	255 6 10
7011	Portlough: Technical School,	8	22	16	—	—	3	71 13 4
	— Bazaar Instruction	—	—	—	—	—	—	—
	Co. BROMBOROUGH OF BIRMINGHAM:							
7012	College of Arts,	—	—	—	—	—	—	—
7013	College of Arts,	—	—	—	—	—	—	—
6047	Municipal Technical Institute,	414	1,025	338	64	37	156	4,302 19 8
	Co. ARMAGH:							
6048	Armagh: Municipal Technical School,	5	64	37	6	—	14	307 10 8
6049	Armagh: Natural History and Philosophical Society & Art School,	—	—	1	3	—	2	12 10 9
6050	Larne: Convent of Our Lady of Mercy,	3	27	13	2	—	9	120 14 3
6051	Larne: Municipal Technical School,	49	43	12	6	1	15	250 16 11
6052	Portlough: Municipal Technical School,	3	26	30	6	1	30	404 12 2
	— Bazaar Instruction	—	—	—	—	—	—	—
	Co. CAVAN:							
—	— Bazaar Instruction	—	—	—	—	—	—	—
	Co. DOWN:							
—	— Bazaar Instruction	—	—	—	—	—	—	—
	Co. DUBLIN:							
7000	Belfry: Municipal Technical School,	16	42	14	8	—	—	190 8 3
6053	Belfry: Municipal Technical School,	19	38	11	10	—	6	179 10 1
6054	Belfry: Technical School,	—	—	—	—	—	—	—

Syllabus and Classwork—continued.

[109]

Topic		Syllabus		Classwork	
Topic	Sub-topics	Topic	Sub-topics	Topic	Sub-topics
1. The Solar System	1.1 The Sun	1.2 The Planets	1.3 The Moons	1.4 The Comets	1.5 The Asteroids
2. The Earth	2.1 The Atmosphere	2.2 The Hydrosphere	2.3 The Lithosphere	2.4 The Biosphere	2.5 The Geosphere
3. The Moon	3.1 The Moon's Surface	3.2 The Moon's Atmosphere	3.3 The Moon's Interior	3.4 The Moon's History	3.5 The Moon's Future
4. The Planets	4.1 Mercury	4.2 Venus	4.3 Earth	4.4 Mars	4.5 Jupiter
5. The Moons	5.1 Earth's Moon	5.2 Jupiter's Moons	5.3 Saturn's Moons	5.4 Uranus's Moons	5.5 Neptune's Moons
6. The Comets	6.1 The Oort Cloud	6.2 The Kuiper Belt	6.3 The Comet Nucleus	6.4 The Comet Tail	6.5 The Comet's History
7. The Asteroids	7.1 The Asteroid Belt	7.2 The Asteroid Families	7.3 The Asteroid Composition	7.4 The Asteroid's History	7.5 The Asteroid's Future
8. The Solar Wind	8.1 The Solar Wind's Origin	8.2 The Solar Wind's Composition	8.3 The Solar Wind's Speed	8.4 The Solar Wind's Pressure	8.5 The Solar Wind's Effects
9. The Magnetosphere	9.1 The Magnetosphere's Origin	9.2 The Magnetosphere's Composition	9.3 The Magnetosphere's Structure	9.4 The Magnetosphere's History	9.5 The Magnetosphere's Future
10. The Ionosphere	10.1 The Ionosphere's Origin	10.2 The Ionosphere's Composition	10.3 The Ionosphere's Structure	10.4 The Ionosphere's History	10.5 The Ionosphere's Future
11. The Thermosphere	11.1 The Thermosphere's Origin	11.2 The Thermosphere's Composition	11.3 The Thermosphere's Structure	11.4 The Thermosphere's History	11.5 The Thermosphere's Future
12. The Exosphere	12.1 The Exosphere's Origin	12.2 The Exosphere's Composition	12.3 The Exosphere's Structure	12.4 The Exosphere's History	12.5 The Exosphere's Future
13. The Solar Cycle	13.1 The Solar Cycle's Origin	13.2 The Solar Cycle's Composition	13.3 The Solar Cycle's Structure	13.4 The Solar Cycle's History	13.5 The Solar Cycle's Future
14. The Solar Flare	14.1 The Solar Flare's Origin	14.2 The Solar Flare's Composition	14.3 The Solar Flare's Structure	14.4 The Solar Flare's History	14.5 The Solar Flare's Future
15. The Solar Wind	15.1 The Solar Wind's Origin	15.2 The Solar Wind's Composition	15.3 The Solar Wind's Structure	15.4 The Solar Wind's History	15.5 The Solar Wind's Future

TABLE II.—LIST OF TECHNICAL.

Classes conducted under Section 11.(a) of the Programme									
School No.	Name of School.	No. of Students in respect of whom grants were paid.						Grant	
		Introductory Courses.	Specialized Courses						
			1st yr.	2nd yr.	3rd yr.	1st and subsequent years.	Students attending by special leave.		
ULSTER—con.—Co. Down—con.									
6005	Drogheda: Technical School,	3	0	5	—	—	8	35 10 9	
6073	Belfast: Technical School,	3	20	0	—	—	3	55 5 4	
6044	Newry: Municipal Technical School,	20	33	20	5	3	23	203 5 2	
6045	Newtownards: Municipal Technical School,	40	22	19	4	3	19	154 0 5	
6746	Warrenpoint: Municipal Technical School,	3	17	1	—	—	1	28 4 6	
—	— Illusant Instruction,	—	—	—	—	—	—	—	
Co. Fermanagh:									
6879	Banishillen: Technical School,	13	8	2	—	—	5	28 8 7	
—	— Illusant Instruction,	—	—	—	—	—	—	—	
Co. Londonderry:									
6235	Coleraine: Municipal Technical School,	22	78	23	11	5	24	283 4 3	
6976	Lisnavey: Technical School,	13	30	32	9	—	8	197 2 0	
6908	Highgate: Technical School,	28	29	20	13	—	9	245 7 6	
—	— Illusant Instruction,	—	—	—	—	—	—	—	
Co. Roscommon:									
6037	Londonderry: Municipal Technical School,	24	104	34	9	6	31	566 17 11	
6868	Northlands School of Horticulture,	—	—	—	—	—	—	—	
Co. Monaghan:									
7020	Curricinacross: Technical School,	—	10	—	—	—	—	8 0 1	
6121	Castleblayney: Technical School,	—	6	4	1	—	—	11 7 9	
7075	Claughton: Technical School,	20	37	7	—	—	1	62 7 4	
7046	Monaghan: Technical School,	—	30	3	—	—	—	12 10 2	
—	— Illusant Instruction,	—	—	—	—	—	—	—	
Co. Tyrone:									
6761	Castlereagh: Technical School,	6	15	13	10	2	8	140 12 11	
6251	Dungannon: Technical School,	10	10	7	1	—	10	85 4 5	
6707	Craig: Technical School,	10	20	5	5	—	8	96 16 3	
6768	Strabane: Technical School,	17	19	9	5	1	2	119 17 6	
—	— Illusant Instruction,	—	—	—	—	—	—	—	
TOTALS FOR ULSTER,		540	5,265	684	260	133	515	19,326 16 9	
CONNAUGHT.									
Co. GALWAY:									
6286	Ballinasloe: Technical School,	6	22	6	—	—	2	31 17 6	
6043	City of Galway Technical Institute,	21	94	5	—	3	17	197 12 5	
6025	Galway (University): College of Irish,	—	—	—	—	—	—	—	
7040	Scholas: Connacht College of Irish,	—	—	—	—	—	—	—	
—	— Illusant Instruction,	—	—	—	—	—	—	—	
Co. LIMERICK:									
—	— Illusant Instruction,	—	—	—	—	—	—	—	
Co. MAYO:									
—	— Illusant Instruction,	—	—	—	—	—	—	—	
Co. ROSCOMMON:									
—	— Illusant Instruction,	—	—	—	—	—	—	—	
Co. SLIGO:									
6765	Sligo: Municipal Technical School,	5	56	28	1	2	8	179 19 1	
6503	Sligo: Ursuline Convent, Higher School of Domestic Economy,	—	—	—	—	—	—	—	
—	— Illusant Instruction,	—	—	—	—	—	—	—	
TOTALS FOR CONNAUGHT,		42	112	39	1	5	27	486 9 9	
TOTALS FOR LIMERICK,									
—	TOTALS FOR MONAGHAN,	220	484	221	65	43	161	4,015 10 18	
—	TOTALS FOR ULSTER,	540	5,265	684	260	133	515	19,326 16 9	
—	TOTALS FOR CONNAUGHT,	42	112	39	1	5	27	486 9 9	
TOTALS FOR IRELAND,		1,442	5,046	1,002	479	215	833	31,245 2 8	

TABLE

LIST OF DAY SECONDARY SCHOOLS, showing the GRANTS paid by the Department
Instruction in the Subjects of the Department's Programme given

No. of School	Name of School	EXPERIMENTAL SCIENCE				Grant	DRAWING				Grant
		No. of Students receiving for Grants					No. of Students receiving for Grants				
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year	
LEINSTER.											
6547	Co. Carlow: Presentation Convent	15	9	6	—	£ s. d.	12	9	3	—	£ s. d.
6166	Drogheda: St. Joseph's Convent School	8	7	—	—	50 18 9	9	7	—	—	7 0 1
6270	Co. Wick: Christian Brothers' School	16	13	—	—	27 10 6	16	13	—	—	9 3 3
6960	Co. Wick: Convent of Mercy	7	11	4	2	54 19 1	7	12	4	2	14 2 5
6365	Kesh: St. Mary's College	18	16	13	—	29 3 5	18	16	—	—	12 9 3
4266	Tallow: Brightness Convent	17	16	7	3	65 14 19	17	12	6	—	15 16 3
6167	Tallow: St. Patrick's Rectory	15	11	—	—	32 16 3	15	11	—	—	8 9 4
Co. Dubuick.											
6254	Baldonagh: Loreto Convent	32	25	2	—	74 10 9	32	25	—	—	21 19 8
6174	Baldonagh: Mission Girls' School	10	11	3	—	31 19 5	10	11	—	—	4 8 6
6963	Blackrock College	57	49	35	27	556 12 5	57	49	—	—	25 13 9
6369	Blackrock: Dominican Convent, St. Rita	26	14	—	—	46 17 6	24	16	—	—	9 12 11
6963	Blackrock: Day Training Preparatory School	10	13	—	—	29 3 0	19	12	—	—	19 5 8
6007	Co. Wick: St. Mary's Dominican Convent	15	16	—	—	50 15 0	15	16	—	—	19 3 4
6167	Co. Wick: Mercers' School	7	6	—	—	20 4 4	7	8	4	—	6 8 3
6357	Castletown: Mount's Road School	7	6	4	—	35 4 10	7	8	—	—	6 3 0
6009	Castletown: St. Vincent's College	51	37	14	10	166 10 6	51	37	—	—	25 10 2
6262	Castletown: Mount Sackville Convent	14	4	2	2	38 16 0	14	4	—	—	4 18 11
6123	Clonsilla: St. Joseph's Rectory	17	9	3	—	41 5 5	17	9	—	—	15 1 1
6501	Clonsilla: Mission Boys' School	14	13	12	—	97 9 1	16	15	—	—	9 1 9
6193	Co. Wick: Lonsdale Abbey	22	6	5	5	45 12 6	22	4	—	—	10 1 3
6866	Downpatrick: St. Mary's University College	15	6	—	5	26 2 10	15	5	—	—	4 10 6
6150	Downpatrick: Christian Brothers' School	22	14	5	—	61 2 12	22	15	—	—	10 17 10
6826	Downpatrick: Presentation Brothers' College	7	6	2	—	16 11 2	7	6	—	—	1 19 7
6996	Downpatrick: Loreto Abbey	9	13	15	—	49 19 6	9	13	—	—	5 9 11
6974	Downpatrick: St. John's School	13	15	5	—	37 14 4	13	19	5	—	12 5 6
6361	Downpatrick: Norfolk College	6	5	2	—	16 14 6	6	5	1	1	5 4 6
6965	Downpatrick College	14	9	7	—	48 14 1	14	6	—	—	5 2 7

[203]

III.

during the Financial Year, 1st April, 1912—31st March, 1913, in respect of
during the Academic Year, 1st August, 1911—31st July, 1912.

MANUAL INSTRUCTION				DOMESTIC ECONOMY				Total Amount of Grants	No. of School		
No. of Students recognised for Grants				Grant	No. of Students recognised for Grants					Grant	
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year				4th Year
—	—	—	—	£ s. d.	—	—	—	—	£ s. d.	£ s. d.	
9	7	—	—	6 6 1	18	9	8	—	20 2 2	90 3 7	8247
15	13	—	—	10 15 5	—	—	—	—	—	44 1 11	8168
—	—	—	—	—	10	—	4	2	12 4 8	56 0 2	8179
—	3	—	—	1 14 5	—	—	—	—	—	63 8 9	8258
—	—	—	—	—	—	—	7	8	9 18 5	83 6 11	8182
15	11	—	—	18 18 5	—	—	—	—	—	94 2 4	8255
—	—	—	—	—	—	—	12	5	28 17 11	68 2 6	8107
—	—	—	—	—	—	—	—	—	—	117 17 4	8224
—	—	—	—	—	—	—	—	—	—	35 16 5	8174
—	—	—	—	—	—	—	—	—	—	304 8 6	8093
—	—	—	—	—	—	—	11	—	13 11 3	78 1 8	8259
19	19	—	—	26 18 8	—	—	—	—	—	123 8 11	8253
—	—	—	—	—	—	—	11	—	12 18 2	83 18 5	8207
—	—	—	—	—	—	—	—	—	—	28 12 7	8187
—	—	—	—	—	—	—	—	—	—	42 7 18	8337
—	—	—	—	—	—	—	—	—	—	189 9 18	8239
—	—	—	—	—	—	—	—	—	—	43 14 11	8282
—	—	—	—	—	—	—	—	—	—	89 5 5	8122
—	—	—	—	—	—	—	—	—	—	105 10 10	8281
—	—	—	—	—	—	—	10	—	11 9 5	71 2 5	8195
—	—	—	—	—	—	—	—	—	—	32 13 4	8003
—	—	—	—	—	—	—	—	—	—	73 9 2	8159
—	—	—	—	—	2	3	—	—	2 18 7	11 14 10	8259
—	—	—	—	—	—	—	—	—	—	18 8 4	8285
—	—	—	—	—	—	—	4	—	5 1 2	89 10 2	8095
—	—	—	—	—	—	—	—	—	—	59 19 10	8274
—	—	—	—	—	—	—	—	—	—	24 18 5	8251
—	—	—	—	—	—	—	—	—	—	58 18 8	8225

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCES				Grant	DRAWING				Grant
		No. of Students recognised for Grants					No. of Students recognised for Grants				
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year	
	Co. DUBLIN—(continued.)					£ s. d.					£ s. d.
5020	Rathmales Lower Corvagh	6	6	—	—	14 9 5	3	6	4	5	12 1 3
5021	Rathmales St. Mary's College	17	15	10	1	86 19 0	27	15	—	—	6 15 10
5022	Rossmore; Ponchartray Day Training Preparatory School	20	21	5	—	177 19 3	30	21	5	—	52 14 10
5152	Co. Roscommon of DUBLIN: Alexandra College	—	—	11	7	33 10 3	—	—	—	—	—
5034	Alexandra School	18	43	—	—	82 5 11	18	43	—	—	59 10 3
5142	Belvedere College	50	36	15	—	155 7 7	59	35	—	—	15 5 8
5035	Bertram Intermediate School for Girls	38	20	—	—	58 14 1	20	20	5	—	24 12 0
5271	Cathedral University School	10	5	5	—	82 13 4	19	4	—	—	3 13 11
5102	Christian Brothers' Schools, James's Street	50	51	11	—	160 17 0	59	31	12	—	31 7 9
5219	Christian Brothers' Schools, Manilla	29	22	6	—	71 13 0	29	22	—	—	15 13 13
5130	Christian Brothers' Schools, N. H. Brunswick St.	30	13	—	—	81 14 7	30	13	—	—	13 1 10
5159	Christian Brothers' Schools, N. H. Richmond St.	175	150	85	15	430 4 5	175	150	—	—	77 1 10
5117	Christian Brothers' Schools, Synge Street	52	57	11	5	212 5 0	52	57	—	—	47 6 5
5346	Christian Brothers' Schools, Westland Hill	35	33	11	—	161 1 10	35	33	—	—	23 4 2
5347	Christ Home School, Clyde Road	10	5	5	1	30 11 5	10	5	4	—	8 6 1
5061	Deacons' Latin and Commercial Sch. for Girls	25	14	—	—	47 17 2	25	14	—	—	10 1 4
5122	Deacons' School for Boys	18	17	11	—	75 3 5	18	17	—	—	7 7 5
5069	Demetrius College, Eccles Street	52	53	15	10	177 17 7	52	53	—	—	28 14 10
1004	King's Hospital	29	19	12	5	108 17 3	29	19	—	—	7 19 6
1005	Lycée College, St. Stephen's Green	42	38	5	6	172 4 1	42	38	—	—	22 14 3
5021	Loreto Convent, North Great George's St.	11	11	—	—	33 8 0	11	11	—	—	9 1 11
5126	Mountjoy School	41	33	14	20	235 2 7	41	33	—	—	20 4 1
5054	Redland High School	3	10	3	—	35 13 20	9	10	4	—	11 14 9
5046	St. Andrew's College	10	14	15	8	245 17 10	70	34	—	—	26 7 4
5122	St. Margaret's Hall, Moord Road	6	5	2	7	58 2 2	5	5	—	—	3 10 5
5115	St. Vincent's Orphanage	37	24	15	11	233 15 2	27	24	—	—	51 3 11
5127	The High School	55	23	12	5	142 9 5	35	23	5	1	26 14 11
5145	Wesley College	49	20	10	—	127 3 4	50	25	5	1	23 11 0
5217	Co. Wickham: Athy: Christian Brothers' Schools	34	14	12	—	63 15 6	24	14	12	—	14 10 5
5256	Coleridge: Collegiate School	30	13	—	—	48 16 6	30	13	22	10	49 8 2
5225	Downpatrick: Christian Brothers' Schools	12	4	2	—	22 15 11	12	4	—	—	4 3 4
5271	Naas: Christian Brothers' Schools	11	13	—	—	22 8 5	11	13	4	—	2 6 7
5123	Salina: Clongowes Wood College	51	53	25	11	264 9 11	51	53	1	—	16 10 5

[205]

SECONDARY SCHOOLS, &c.—continued.

MANUAL INSTITUTION				DOMESTIC ECONOMY				Total Amount of Grants	No. of Schools		
No. of Students reorganised for Grants				Grant	No. of Students reorganised for Grants					Grant	
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year				4th Year
				£ s. d.					£ s. d.	£ s. d.	
—	—	—	—	—	—	—	—	—	—	27 13 6	6920
—	—	—	—	—	—	—	—	—	—	73 6 10	6951
39	21	5	—	69 1 1	—	—	—	—	—	221 6 6	6968
—	—	—	—	—	—	—	—	—	—	56 19 6	6119
—	—	—	—	—	—	—	—	—	—	111 13 6	6964
—	—	—	—	—	—	—	—	—	—	153 15 3	6142
—	—	—	—	—	16	16	8	—	98 14 6	104 6 6	6866
—	—	—	—	—	—	—	—	—	—	36 7 3	6271
—	—	—	—	—	—	—	—	—	—	159 4 9	6163
10	—	—	—	6 1 1	—	—	—	—	—	98 14 6	6219
20	14	—	—	16 4 6	—	—	—	—	—	61 0 11	6130
166	95	—	—	61 9 6	—	—	—	—	—	634 7 9	6156
21	—	—	—	16 7 6	—	—	—	—	—	406 16 10	6117
—	—	—	—	—	—	—	—	—	—	124 6 8	6344
—	—	—	—	—	—	—	—	—	—	56 17 6	6847
—	—	—	—	—	—	—	16	4	19 16 6	77 13 6	6991
—	—	—	—	—	—	—	—	—	—	59 11 9	6152
—	—	—	—	—	—	—	26	11	43 9 3	254 4 8	6002
—	—	—	—	—	—	—	—	—	—	116 7 9	6004
—	—	—	—	—	—	—	16	11	49 9 4	253 16 6	6845
—	—	—	—	—	—	—	6	—	7 9 0	40 6 11	6051
—	—	—	—	—	—	—	—	—	—	255 8 6	6166
—	—	—	—	—	—	—	—	—	—	43 10 7	6054
—	—	—	—	—	—	—	—	—	—	272 6 2	6943
—	—	—	—	—	—	—	—	—	—	41 13 7	6129
29	21	21	—	43 6 6	—	—	—	—	—	206 7 7	6115
—	—	—	—	—	—	—	—	—	—	172 4 7	6137
4	—	—	—	1 5 1	—	—	—	—	—	164 19 7	6148
28	—	—	—	3 3 6	—	—	—	—	—	67 6 10	6217
—	—	—	—	—	—	—	16	9	36 4 11	117 9 9	6085
25	—	—	—	9 17 10	—	—	—	—	—	50 17 1	6025
—	—	—	—	—	—	—	—	—	—	21 15 9	6221
46	13	—	—	54 19 0	—	—	—	—	—	265 18 4	6129

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE				Grand	DRAWING				Grand					
		No. of Students recognized for Credits					No. of Students recognized for Credits									
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year						
						A	B	C					A	B	C	
6304	Ch. KILKENNY: Orlan: Christian Brothers' Schools	22	16	—	—	47	5	11	22	15	—	—	10	11	4	
6455	Overbridge: Brightline Convent	14	4	—	—	18	3	3	14	4	—	—	7	1	2	
6459	Kilkeny: Christian Brothers' Schools	34	20	13	—	67	5	4	34	20	—	—	16	9	11	
6467	Kilkeny College	17	16	10	—	103	8	3	17	15	10	—	20	10	6	
6508	Kilkeny: Loreto Convent	5	7	4	—	25	19	4	5	7	—	—	4	13	2	
6535	Kilkeny: St. Kieran's College	38	38	13	7	144	8	5	38	36	18	—	22	12	4	
6702	Kilkeny: Day Trades Preparatory School	7	1	4	1	49	2	9	7	1	4	1	17	6	0	
6755	Kilkeny Convent: Presentation Brothers' Seminary	15	9	4	—	40	5	6	15	9	—	—	4	10	4	
6800	Portlinton: Arlington School	7	—	—	—	5	3	3	7	—	—	—	3	17	6	
6862	Portlinton: Christian Brothers' Schools	7	5	2	—	28	8	2	7	5	—	—	3	14	5	
6869	(Roscrea): Mount St. Joseph's Abbey	42	42	17	5	123	2	2	42	42	—	—	16	4	3	
6958	Ch. LEWIS: Longford: St. Mel's College	15	15	11	4	78	10	7	15	15	—	—	9	3	11	
6963	Ch. LEWIS: Drogheda: Christian Brothers' Schools	22	26	9	2	55	11	11	22	22	—	—	15	5	2	
6994	Drogheda: Grammar School	16	12	4	—	35	3	5	16	12	—	—	3	18	3	
6995	Dundalk: Christian Brothers' Schools	46	17	10	—	73	4	8	46	17	—	—	10	15	9	
6996	Dundalk: Convent of Mercy	12	4	—	—	21	17	8	12	4	—	—	4	17	7	
6997	Dundalk: Educational Institution	14	26	11	—	107	13	6	14	26	—	—	10	17	6	
6998	Dundalk: Ladies' School	5	4	3	—	33	14	10	5	4	—	—	2	8	5	
6999	Dundalk: St. Mary's College	38	19	4	3	99	19	2	38	19	—	—	16	6	2	
7000	Ch. LEWIS: Kells: Christian Brothers' Schools	20	18	14	—	112	4	1	20	18	—	—	22	6	5	
7001	Naven: Loretto Abbey	24	27	—	—	62	15	9	24	27	2	—	25	16	11	
7002	Queen's Convent: Abbeylisk: Brigantine Convent	11	7	5	4	43	12	11	11	7	—	—	7	16	1	
7003	Abbeylisk: Proton School	4	5	1	—	15	9	3	4	5	—	—	3	15	9	
7004	Abbeylisk: Seminary	2	—	1	—	4	3	6	2	—	—	—	0	13	9	
7005	Maryborough: Christian Brothers' Schools	21	19	4	4	53	18	1	21	19	—	—	11	17	4	
7006	Maryborough: Monastery School	15	11	—	—	49	7	8	15	11	—	—	11	1	3	
7009	Monmouth: St. Bridget's Convent	21	9	9	—	83	17	2	21	9	6	—	19	1	5	
7014	Ch. WESTMORLAND: Athlone: Jacobus House School	11	10	—	—	26	5	3	11	10	—	—	3	15	2	
7011	Athlone: Ranshaw School	22	18	19	—	71	12	6	22	18	—	—	7	16	6	
7015	Athlone: St. Mary's School	9	4	8	—	10	17	16	9	4	—	—	2	6	7	
7061	Mullingar: Christian Brothers' Schools	11	6	3	—	27	9	6	11	6	—	—	5	12	1	
7210	Mullingar: Loreto Convent	26	12	—	—	49	6	10	26	11	—	1	13	5	9	
7221	Mullingar: St. Finian's College	48	91	15	6	120	15	2	48	91	—	—	14	1	6	

[207]

SECONDARY SCHOOLS, &c.—continued.

MANUAL INSTRUCTION				DOMESTIC ECONOMY					Total Amount of Grants	No. of School	
No. of Students recognised for Grants				Grant	No. of Students recognised for Grants						Grant
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
s. s. d.					s. s. d.				s. s. d.		
29	10	—	—	14 8 11	—	—	—	—	—	72 10 2	4264
—	—	—	—	—	14	4	—	—	14 9 6	55 14 1	4425
—	—	—	—	—	—	—	—	—	—	101 8 3	6009
—	—	—	—	—	—	—	—	—	—	125 16 11	4467
—	—	—	—	—	—	—	—	—	—	35 8 6	4344
—	—	—	—	—	—	—	—	—	—	174 15 10	6135
0	1	3	—	15 4 2	—	—	—	—	—	76 0 4	6783
9	8	—	—	5 10 7	—	—	—	—	—	80 0 5	4285
—	—	—	—	—	—	—	—	—	—	4 5 8	4920
7	8	—	—	4 6 7	—	—	—	—	—	36 10 2	4362
8	4	—	—	3 10 11	—	—	—	—	—	209 9 6	6849
—	3	—	—	1 3 7	—	—	—	—	—	59 4 1	6223
—	—	—	—	—	—	—	—	—	—	118 17 7	4009
—	—	—	—	—	—	—	—	—	—	59 0 2	4006
—	—	—	—	—	—	—	—	—	—	104 0 5	6153
—	—	—	—	—	—	—	6	—	11 10 4	38 5 7	6350
—	—	—	—	—	—	—	—	—	—	118 10 4	6069
—	—	—	—	—	—	—	—	—	—	26 5 3	4066
—	—	—	—	—	—	—	—	—	—	186 0 6	6116
20	10	—	—	17 11 6	—	—	—	—	—	161 10 2	5193
—	—	—	—	—	5	9	2	0	95 19 4	114 0 0	4366
—	—	—	—	—	11	7	3	8	62 14 0	94 17 0	6230
—	—	—	—	—	—	—	—	—	—	28 5 0	4029
—	—	—	—	—	—	—	—	—	—	4 10 9	4905
20	10	—	—	12 17 1	—	—	—	—	—	106 13 4	6176
16	11	—	—	12 17 0	—	—	—	—	—	72 4 7	6198
—	—	—	—	—	21	2	9	—	40 8 5	140 7 1	6359
—	—	—	—	—	—	—	—	—	—	29 0 8	5014
21	15	11	—	16 12 4	—	—	—	—	—	86 2 4	4611
—	—	—	—	—	—	—	—	—	—	21 4 0	6215
—	—	—	—	—	—	—	—	—	—	35 5 1	6001
—	—	—	—	—	10	—	6	2	23 14 6	90 1 1	6538
—	—	—	—	—	—	—	—	—	—	164 12 5	4441

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE				DRAWING			
		No. of Students recorded for Grants				No. of Students recorded for Grants			
		1st Year	2nd Year	3rd Year	4th Year	1st Year	2nd Year	3rd Year	4th Year
		Grant				Grant			
		s	d.			s	d.		
6884	Co. Wicklow, Kinsworthy: Christian Brothers' Schools	23	15	2	4	68	15	3	25
6849	Kinsworthy: Loreto Convent	12	12	—	—	25	12	2	12
6865	Gossey: Loreto Abbey	17	12	—	—	42	1	4	17
6881	New Ross: Christian Brothers' Schools	17	17	12	—	72	12	6	17
6864	New Ross: John Ivory School	9	3	1	—	6	3	2	3
6712	Newswberry: St. Mary's Convent	22	9	7	1	116	16	6	36
6841	Wexford: Christian Brothers' Schools, Joseph St.	28	19	—	—	26	12	5	38
6866	Wexford: Loreto Convent	22	16	9	—	92	6	5	38
6870	Wexford: St. Peter's College	17	11	—	—	20	3	16	17
6810	Wexford: The Vale School	19	9	2	—	48	3	11	19
6822	Co. Wicklow, Day: Loreto Convent	11	4	4	—	20	12	6	11
TOTALS FOR LIMERICK		1,511	1,781	727	209	6,126	9	6	2,511
MUNSTER.									
6137	Co. Clare: Ennis: Christian Brothers' Schools	24	23	15	—	99	14	9	24
6331	Ennis: St. Plannan's College	12	19	14	—	77	9	9	16
6253	Kinsbury: Christian Brothers' Schools	12	12	—	—	60	7	3	12
6295	Kilrush: Christian Brothers' Schools	19	12	11	—	61	2	3	12
6812	Co. Cork: Blackrock: Ursula Convent	12	14	—	—	26	19	6	12
6873	Buttevant: St. Mary's Convent of Mercy	9	—	6	4	66	13	9	9
6266	Charleville: Christian Brothers' Schools	26	21	—	—	50	0	6	22
6345	Charleville: St. Joseph's Convent of Mercy	16	12	5	2	75	11	1	16
6240	Doneraile: Christian Brothers' Schools	16	11	—	—	21	4	9	16
6137	Ferry: Christian Brothers' Schools	21	15	2	3	25	11	11	21
6225	Ferry: Loreto Convent	22	15	—	—	49	17	9	22
6191	Ferry: St. Colman's College	22	41	29	16	129	18	4	22
6269	Maroon: Convent of Mercy	19	12	—	—	25	16	5	19
6208	Mallow: Pauline Academy	5	2	—	—	9	5	2	5
6131	Milford: Christian Brothers' Schools	22	19	14	4	110	3	11	22
6740	Milford College	5	—	6	1	28	6	1	5
6119	Milkenstown: Christian Brothers' Schools	12	9	7	—	27	10	4	12
6225	Quonstown: Convent of Mercy	10	6	—	—	23	7	5	10
6221	Quonstown: Day Trades Preparatory School	10	3	—	—	24	13	4	10

[209]

SECONDARY SCHOOLS, &c.—continued.

MANUAL INSTRUCTION					DOMESTIC ECONOMY					Total Amount of Grants	No. of School
No. of Students recognised for Grants				Grant	No. of Students recognised for Grants				Grant		
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
£ s. d.					£ s. d.					£ s. d.	
93	10	—	—	9 17 6	—	—	—	—	—	66 18 3	5104
—	—	—	—	—	—	—	9	1	4 8 5	59 18 8	6043
—	—	—	—	—	—	—	6	—	11 14 11	76 9 9	6045
—	—	—	—	—	—	—	—	—	—	63 8 3	6161
—	—	—	—	—	—	—	—	—	—	7 9 3	6664
—	—	—	—	—	31	9	4	3	39 1 4	189 9 5	6733
25	—	—	—	10 6 1	—	—	—	—	—	84 16 4	6341
—	—	—	—	—	—	—	3	—	13 18 7	136 19 16	6986
17	11	—	—	9 16 4	—	—	—	—	—	55 6 10	6576
—	—	—	—	—	—	—	—	—	—	48 1 4	6366
—	—	—	—	—	—	—	—	—	—	36 7 3	6093
634	598	46	—	456 3 1	146	39	104	58	631 1 9	10,657 17 3	—
19	—	—	—	6 0 4	—	—	—	—	—	116 1 6	6187
—	—	—	—	—	—	—	—	—	—	46 7 7	6331
13	13	—	—	9 19 9	—	—	—	—	—	48 16 5	6336
13	10	—	—	7 8 10	—	—	—	—	—	76 17 0	6965
—	—	—	—	—	11	12	—	—	16 14 3	78 1 6	6012
—	—	—	—	—	6	—	6	4	33 13 4	83 11 11	6076
24	13	—	—	10 13 10	—	—	—	—	—	76 14 10	6234
—	—	—	—	—	16	13	3	2	41 16 0	127 11 7	6140
15	11	—	—	7 8 3	—	—	—	—	—	45 0 2	6340
22	14	—	—	16 16 10	—	—	—	—	—	335 19 8	6167
—	—	—	—	—	20	18	13	6	44 13 8	110 1 6	6308
—	—	—	—	—	—	—	—	—	—	236 14 9	6191
—	—	—	—	—	—	—	4	—	6 19 1	86 13 6	6509
6	9	—	—	1 18 1	—	—	—	—	—	18 3 14	6525
13	11	—	—	7 13 3	—	—	—	—	—	120 16 9	6131
—	—	—	—	—	—	—	—	—	—	19 18 3	6740
13	11	—	—	8 14 8	—	—	—	—	—	87 18 10	6136
—	—	—	—	—	—	—	6	—	18 13 1	86 19 3	6555
10	3	—	—	9 19 0	—	—	—	—	—	69 11 9	6361

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCES				DRAWINGS			
		No. of Students recognized for Grants				No. of Students recognized for Grants			
		1st Year	2nd Year	3rd Year	4th Year	1st Year	2nd Year	3rd Year	4th Year
		G. A. S. D.				G. A. S. D.			
4749	Co. Cork (seafarers).	6	2	6	—	22	8	8	—
4750	St. Mary's : Intermediate and Univ. School	20	20	2	—	20	20	—	—
4751	Youghal : Christian Brothers' Schools	—	—	—	—	—	—	—	—
4752	Co. Down : Co. Down ; Christian Brothers' College	28	11	11	22	168	11	9	—
4753	Christian Brothers' Day Training Preparatory School	32	—	—	—	111	1	2	—
4754	Christian Brothers' Schools, Our Lady's Mount	125	15	30	14	247	8	6	—
4755	Christian Brothers' Schools, Sullivan's Quay	44	22	—	—	86	13	8	—
4756	Christian Brothers' School, Carrigrohilly	18	29	5	8	38	4	5	—
4757	High School	19	19	—	—	42	9	9	—
4758	Presentation Brothers' College	28	31	20	—	155	15	2	—
4759	Booth's Secondary	22	29	—	—	80	19	11	—
4760	St. Aloysius' School, St. Mark's of the Isle	24	25	—	—	96	3	11	—
4761	St. Vincent's Convent School	22	22	9	—	75	9	5	—
4762	Upperville High School, St. Andrew's	27	24	—	—	78	20	0	—
4763	Co. Kerry :	—	—	—	—	—	—	—	—
4764	Drishil : Christian Brothers' Schools	29	19	10	7	109	2	2	—
4765	Killarney : Loreto Convent	24	15	8	5	90	4	9	—
4766	Killarney : St. Brendan's Secondary School	28	14	19	—	47	9	5	—
4767	Killarney : Intermediate School	21	24	—	—	63	11	2	—
4768	Lisdoon : St. Michael's College	28	17	7	—	64	9	5	—
4769	Trillick : Christian Brothers' Schools	49	19	14	—	91	9	2	—
4770	Trillick : Jeffers' Institute	19	16	4	7	71	10	1	—
4771	Trillick : Presentation Convent	28	15	—	—	49	14	2	—
4772	Co. Limerick :	—	—	—	—	—	—	—	—
4773	Bruff : St. Mary's Convent	14	15	—	—	37	15	1	—
4774	Kilgarney : St. Andrew's Secondary School	9	1	4	—	25	9	11	—
4775	Co. Roscommon of Limerick :	—	—	—	—	—	—	—	—
4776	Christian Brothers' Schools (Section I.)	61	59	10	13	219	3	10	—
4777	Christian Brothers' Schools (Section II.)	22	—	—	—	42	6	6	—
4778	Convent College	29	9	14	—	71	10	11	—
4779	High School, Richmond House	3	—	—	1	4	15	19	—
4780	Intermediate School, Rutland Street	1	3	4	—	8	15	11	—
4781	Lisdoon Hill Convent	28	19	—	—	56	6	6	—
4782	Mount St. Alphonsus' School	8	4	—	4	20	15	4	—
4783	Mungret College	19	18	—	—	37	3	8	—
4784	St. Monica's College	29	21	12	3	74	14	9	—
4785	Villiers' Endowed Boys' School	4	5	—	3	14	9	2	—
4786	Villiers' Endowed Girls' School	2	—	—	—	5	14	1	—

[211]

SECONDARY SCHOOLS, &c.—continued.

MANUAL INSTRUCTION				DOMESTIC ECONOMY				Total Amount of Grants	No. of School		
No. of Students receiving for Grants				Grants	No. of Students receiving for Grants					Grant	
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year				4th Year
£	s.	d.		£	s.	d.		£	s.	d.	
5	3	5	—	5 11 5	—	—	—	—	31 13 11	6142	
16	19	—	—	12 5 4	—	—	—	—	164 17 5	6026	
19	—	—	—	9 16 6	—	—	—	—	180 7 16	6017	
52	—	—	—	44 15 3	—	—	—	—	164 7 2	7925	
21	17	—	—	12 15 4	—	—	—	—	406 6 10	6018	
—	—	—	—	—	—	—	—	—	100 9 0	6354	
—	—	—	—	—	—	—	—	—	108 4 6	6044	
—	—	—	—	—	—	—	—	—	55 15 11	6051	
—	—	—	—	—	—	—	—	—	175 17 11	6056	
—	—	—	—	—	—	8	1	15 7 6	94 15 1	6077	
—	—	—	—	—	11	1	9	4	22 16 6	6057	
—	—	—	—	—	—	—	—	—	101 10 6	6024	
—	—	—	—	—	—	—	—	—	110 11 2	6116	
—	—	—	—	—	—	—	—	—	113 9 10	6154	
—	—	—	—	—	—	—	—	—	115 14 7	6046	
—	—	—	—	—	—	—	—	—	32 16 4	6241	
—	—	—	—	—	—	—	—	—	76 7 7	6067	
—	—	—	—	—	—	—	—	—	67 10 0	6317	
—	—	—	—	—	—	—	—	—	166 7 11	6179	
—	—	—	—	—	—	—	—	—	52 12 11	6136	
—	—	—	—	—	—	—	—	—	56 7 2	6056	
—	—	—	—	—	45	15	15	5	46 7 4	126 6 7	6026
—	—	—	—	—	—	—	—	—	27 6 4	6217	
—	9	—	—	6 15 6	—	—	—	—	239 16 11	6160	
52	—	—	—	56 11 18	—	—	—	—	62 17 10	6065	
—	—	—	—	—	—	—	—	—	77 0 2	6023	
—	—	—	—	—	—	—	1	6 17 6	7 6 1	6045	
—	—	—	—	—	—	—	—	—	6 16 5	6050	
—	—	—	—	—	—	—	15	4	22 16 6	6057	
—	—	—	—	—	—	—	—	—	34 13 18	6207	
—	—	—	—	—	—	—	—	—	45 14 9	6067	
—	—	—	—	—	—	—	—	—	55 9 11	6151	
—	—	—	—	—	—	—	—	—	35 7 1	6044	
—	—	—	—	—	—	—	4	2 4 0	4 19 11	6037	

[218]

SECONDARY SCHOOLS, &c.—continued.

MANUAL INSTRUCTION				DOMESTIC ECONOMY				Total Amount of Grants	No. of Schools		
No. of Students recognised for Grants				Grant	No. of Students recognised for Grants					Grant	
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year				4th Year
				£ s. d.					£ s. d.	£ s. d.	
23	16	—	—	13 18 11	—	—	—	—	—	64 17 3	6181
9	6	—	—	5 10 8	—	—	—	—	—	31 6 2	6261
—	—	—	—	—	—	—	5	4	10 7 5	49 6 4	6147
—	—	—	—	—	—	—	—	—	—	79 1 3	6296
—	—	—	—	—	—	—	—	—	—	32 9 9	6294
11	—	—	—	9 17 6	—	—	—	—	—	57 11 11	6184
6	7	—	—	5 17 9	—	—	—	—	—	41 1 4	6079
17	14	—	—	43 12 1	—	—	—	—	—	146 6 3	6398
36	11	—	—	8 14 6	—	—	—	—	—	79 1 3	6229
23	19	—	—	6 19 4	—	—	—	—	—	117 7 11	6186
—	—	—	—	—	16	13	—	—	21 3 9	77 9 7	6146
—	—	—	—	—	10	—	11	—	14 11 6	129 19 6	6069
14	14	4	—	10 19 6	—	—	—	—	—	76 19 29	6163
—	—	—	—	—	5	—	5	—	9 7 4	42 6 0	6391
—	—	—	—	—	—	—	—	—	—	25 1 4	6099
16	32	—	—	10 6 6	—	—	—	—	—	62 6 9	6234
11	6	—	—	6 1 7	—	—	—	—	—	49 3 11	6094
7	14	—	—	6 1 16	—	—	—	—	—	34 16 4	6291
—	—	—	—	—	—	—	—	—	—	58 11 9	6021
20	—	—	—	6 9 29	—	—	—	—	—	190 5 6	6116
—	—	—	—	—	—	—	—	—	—	73 9 3	6186
—	—	—	—	—	24	13	6	6	26 15 5	165 16 0	6464
—	—	—	—	—	—	—	6	2	22 9 1	39 6 10	6061
12	9	—	—	17 19 11	—	—	—	—	—	60 16 4	6019
19	6	—	—	6 4 9	—	—	—	—	—	49 19 4	6074
—	—	—	—	—	13	7	7	6	23 19 2	96 4 3	7923
—	—	—	—	—	20	6	13	—	16 5 1	46 16 6	6166
329	247	9	—	546 6 11	107	67	126	26	486 11 7	6,684 19 1	—

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SOURCE				DRAWING			
		No. of Students recognised for Grant—				No. of Students recognised for Grants			
		1st Year	2nd Year	3rd Year	4th Year	1st Year	2nd Year	3rd Year	4th Year
	ULSTER.								
	Co. ANTRIM:								
5785	Ballyclare: Intermediate School.	19	9	—	—	22	4	9	—
6119	Ballymena Academy.	71	43	21	10	258	14	9	—
5703	Ballymena: Municipal Day Trades Preparatory School.	8	7	—	—	44	7	4	—
6044	Ballymena: Intermediate School.	25	17	3	—	85	7	8	—
5551	Carrickfergus: Ladies' Collegiate School.	12	4	4	—	93	11	9	—
5150	Larne: Grammar School.	13	12	8	2	83	7	2	—
5547	Larne: Intermediate School.	3	7	1	—	18	7	5	—
5528	Lisburn: Convent of the Sacred Heart of Mary.	3	3	1	—	11	0	9	—
5194	Lisburn: Intermediate School.	13	17	4	—	70	17	8	—
5114	Lisburn: Ulster Provincial School.	15	12	4	—	43	16	9	—
	Co. DUBLIN OF BELFAST:								
5355	Christian Brothers' Schools, St. Mary's.	43	22	12	—	135	11	3	—
5359	Christian Brothers' Schools, St. Patrick's.	29	30	—	—	54	11	2	—
5551	Christian Brothers' Day Trades Preparatory School.	55	55	15	—	263	11	11	—
5375	Collegiate School, Brookvale Avenue.	6	7	5	2	33	3	7	—
5154	Girls' Collegiate School, Mount Pleasant.	19	10	—	—	35	19	1	—
5225	Mercantile College.	42	19	10	1	125	9	3	—
5218	Methodist College.	35	24	12	—	130	8	1	—
5354	Municipal Day Trades Preparatory School.	35	30	14	—	244	7	1	—
5155	Princess Gardens School.	21	19	6	1	81	5	9	—
5235	Roseville High School.	4	3	2	—	12	1	3	—
5352	Royal Academic Institution.	115	95	35	11	559	16	7	—
5059	Royal Academy.	50	31	9	4	147	13	8	—
5154	St. Dominic's High School.	22	15	—	—	59	4	19	—
5095	St. Malachy's College.	37	13	3	8	115	4	5	—
5071	Victoria College.	39	20	14	5	192	7	0	—
	Co. ARMAGH:								
5309	Armagh: Christian Brothers' Schools.	7	12	5	—	35	5	4	—
5055	Armagh: Royal School.	17	14	10	—	61	15	5	—
5053	Larne College.	11	13	3	3	44	11	3	—
5551	Portadown: Day Trades Preparatory School.	21	—	4	—	59	13	2	—
5552	Portadown: Ladies' School.	12	13	4	—	48	0	5	—

[215]

SECONDARY SCHOOLS, &c.—continued.

Manual Instruction				Domestic Economy				Total Amount of Grains	No. of school		
No. of Students recognised for Grains				Grain	No. of Students recognised for Grains					Grain	
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year				4th Year
				£ s. d.					£ s. d.	£ s. d.	
—	—	—	—	—	—	—	—	—	—	81 15 9	6290
—	—	—	—	—	—	—	—	—	—	537 14 5	6110
9	6	—	—	14 15 8	—	—	—	—	—	72 8 1	7094
5	4	—	—	5 4 6	12	11	6	9	24 18 10	120 9 0	6344
—	—	—	—	—	—	—	—	—	—	87 2 9	6051
—	—	—	—	—	—	—	—	—	—	99 16 10	6160
—	—	—	—	—	3	5	1	—	4 6 10	36 16 10	6357
—	—	—	—	—	9	2	2	—	7 5 7	23 6 9	6020
—	—	—	—	—	—	—	—	—	—	64 8 9	6194
—	—	—	—	—	—	—	—	—	—	65 9 10	6114
—	—	—	—	—	—	—	—	—	—	154 0 6	6300
—	—	—	—	—	—	—	—	—	—	101 6 11	6369
66	44	15	—	97 7 6	—	—	—	—	—	517 1 1	6086
—	—	—	—	—	—	—	—	—	—	41 8 6	6175
—	—	—	—	—	—	—	—	—	—	49 9 10	6174
—	—	—	—	—	—	—	—	—	—	149 16 0	6190
—	—	—	—	—	—	—	5	—	9 16 2	151 10 10	6210
85	51	14	—	190 8 7	—	—	—	—	—	995 2 9	6664
—	—	—	—	—	—	—	—	—	—	78 37 0	6106
—	—	—	—	—	—	—	—	—	—	15 6 2	6310
—	—	—	—	—	—	—	—	—	—	568 4 4	6002
—	—	—	—	—	—	—	—	—	—	187 2 3	6049
—	—	—	—	—	—	—	4	—	8 0 1	79 8 2	6164
—	—	—	—	—	—	—	—	—	—	132 6 10	6005
—	—	—	—	—	—	—	2	2	4 12 1	145 19 7	6071
—	—	—	—	—	—	—	—	—	—	37 12 2	6209
—	—	—	—	—	—	—	—	—	—	71 4 10	6055
—	—	—	—	—	—	—	—	—	—	49 16 7	6053
91	—	4	—	16 16 4	—	—	—	—	—	110 10 10	6061
—	—	—	—	—	—	—	—	—	—	58 10 11	6023

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE				Grant	DRAWING				Grant
		No. of Students registered for Grade					No. of Students registered for Grade				
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year	
	Co. CAVAN:										
6181	Cavan: Royal School	8	9	2	—	27 5 2	8	9	—	—	27 5 2
6124	Cavan: St. Patrick's College	14	5	20	—	55 10 1	24	2	—	—	7 6 3
	Co. DONEGAL:										
6073	Letchmerry: Loreto Convent	12	12	16	—	69 13 5	12	12	10	3	18 11 5
6007	Letchmerry: St. James's College	16	16	7	—	45 10 1	16	16	—	—	8 5 6
6003	Lifford: Priory Schools	14	19	6	2	45 15 1	14	15	—	—	11 9 5
6057	Lifford: Royal School	13	7	2	4	47 19 0	13	7	1	—	9 0 3
	Co. DOWN:										
6006	Bushbridge: Academic Institution	14	12	9	—	62 4 7	14	12	—	—	13 11 8
6005	Bushbridge: Erskine Academy	9	3	3	1	10 5 0	9	3	—	—	4 10 7
6057	Bangor: Endowed School	15	14	5	—	46 6 5	15	14	4	—	10 16 4
6316	Bangor: Glenola School	8	5	4	—	15 3 7	8	5	—	—	2 3 5
6222	Bangor: Ladies' School, Down	2	13	—	—	55 9 6	2	12	2	—	8 12 0
6072	Belfast: Upper Sullivan School	13	13	10	1	51 5 8	13	13	3	—	12 5 9
6171	Berry: Christian Brothers' School	21	12	5	—	66 19 1	21	15	—	—	9 6 7
6263	Berry: Intermediate School	14	12	—	—	58 16 4	14	15	—	—	0 15 6
6009	Berry: St. Columba's College	0	10	6	4	61 1 10	0	10	6	4	12 15 1
	Co. FERRISBURGH:										
6069	Ferrisburgh: Porters Royal School	17	9	10	6	76 11 1	17	9	—	—	7 5 3
6076	Ferrisburgh: St. Michael's Intermediate School	13	11	9	—	39 7 0	13	11	—	—	4 1 5
	Co. LONDONDERRY:										
6186	Coleraine: Academic Institution	10	16	14	—	101 19 6	23	16	—	—	12 19 1
6128	Coleraine: The High School	11	17	—	—	69 19 2	11	17	8	3	21 17 6
6088	Larne: Beecham School	12	6	—	—	21 16 4	12	6	1	—	9 11 4
6225	Markinch: Railway Endowed School	11	13	—	—	50 0 7	11	14	6	—	18 0 3
	Co. MONAGHAN or LONDONDERRY:										
6061	Christian Brothers' School, Broomfield Hall	22	12	10	—	67 12 5	22	12	—	—	7 1 10
6069	Convent of Our Lady of Mercy	26	8	16	6	137 2 11	26	8	18	—	22 0 11
6064	Forde College	17	16	10	—	124 9 1	17	16	—	—	10 2 1
7100	Municipal Day Trades Preparatory School	18	9	—	—	94 13 8	18	9	—	—	16 7 13
6162	St. Columba's College	24	11	—	—	66 14 8	24	11	—	—	11 2 19
6075	St. Luce's College	11	7	—	—	52 8 11	11	7	5	5	21 5 3
4999	Strand House School	11	11	19	8	176 5 5	11	11	—	—	15 9 8
6052	Victoria High School	35	49	10	12	281 10 9	38	49	10	12	60 12 4

[217]

SECONDARY SCHOOLS, &c.—continued.

MANUAL DOMESTIC				DOMESTIC ECONOMY					Total Amount of Grants	No. of Schs.	
No. of Students recognised for Grants				Grant	No. of Students recognised for Grants						Grant
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
—	—	—	—	£ s. d.	—	—	—	—	£ s. d.	33 10 11	6181
—	—	—	—	—	—	—	—	—	—	90 5 4	6184
—	—	—	—	—	12	10	—	—	16 10 0	85 2 10	6223
—	—	—	—	—	—	—	—	—	—	33 10 0	6207
—	—	—	—	—	—	—	—	—	—	67 4 8	6202
—	—	—	—	—	—	—	—	—	—	37 0 3	6207
—	—	—	—	—	—	—	—	—	—	60 10 2	6228
—	—	—	—	—	—	—	—	—	—	34 10 7	6228
—	—	—	—	—	—	—	—	—	—	57 2 9	6227
—	—	—	—	—	—	—	—	—	—	26 7 3	6210
—	—	—	—	—	—	—	—	—	—	35 12 6	6229
4	8	—	—	2 15 11	—	—	—	—	—	97 10 4	6275
—	—	—	—	—	—	—	—	—	—	60 0 1	6171
7	3	—	—	4 7 10	9	7	—	—	6 8 7	47 0 3	6203
—	—	—	—	—	—	—	—	—	—	74 10 11	6222
—	—	—	—	—	—	—	—	—	—	36 12 3	6129
—	—	—	—	—	—	—	—	—	—	43 0 8	6278
—	—	—	—	—	—	—	—	—	—	134 9 7	6130
—	—	—	—	—	—	—	—	—	—	62 12 3	6139
—	—	—	—	—	—	—	—	—	—	31 7 8	6225
—	—	—	—	—	—	—	—	—	—	60 0 10	6240
22	12	—	—	18 10 1	—	—	—	—	—	109 10 7	6256
—	—	—	—	—	1	—	7	8	31 8 1	109 10 11	6248
—	—	—	—	—	—	—	—	—	—	162 11 0	6204
18	9	—	—	21 12 10	—	—	—	—	—	144 14 9	7000
—	—	—	—	—	—	—	—	—	—	57 10 3	6149
—	—	—	—	—	—	—	—	—	—	40 14 2	6273
—	—	—	—	—	—	—	—	—	—	161 15 4	6199
—	—	—	—	—	—	—	11	—	22 9 7	284 10 8	6250

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE				DEATHS			
		No. of Students recognised for Grants				No. of Students recognised for Grants			
		1st Year	2nd Year	3rd Year	4th Year	1st Year	2nd Year	3rd Year	4th Year
		R. S. S.				R. S. S.			
6326	MONAHAN: Carolemacross: St. Louis' Convent	34	3	13	2	126	1	9	34
6325	Carolemacross: Vincent Weymouth's Grammar School	4	3	3	—	12	18	8	4
6326	Monahan: Christian Brothers' Schools	19	5	2	—	22	12	2	12
6325	Monahan: St. Louis' Convent	28	21	19	3	231	3	2	32
6073	Monahan: St. Maurice's Seminary	24	16	12	—	160	0	4	21
6322	CO. TIRONE: Cookstown Academy	7	11	3	—	30	4	2	7
6323	Cookstown: Ladies' School	6	6	7	1	22	12	1	6
6000	Dungannon: Girls' School	11	7	1	1	25	19	9	12
6331	Dungannon: Royal School	12	16	10	1	67	17	5	13
6090	Dungannon: St. Patrick's Academy	9	11	5	—	35	4	4	9
6074	Omagh Academy	12	14	7	—	22	9	4	12
6190	Omagh: Christian Brothers' Schools	25	20	4	4	97	10	4	25
6003	Omagh: High School	10	11	3	—	45	7	1	10
6211	Omagh: Louisa Convent	16	27	7	2	66	16	10	15
TOTALS FOR ULSTER.		1,248	1,137	536	105	6,509	113	5	1,540
CONNAUGHT.									
6039	CO. GALWAY: Ballinasloe: St. Joseph's College	16	16	0	—	54	2	6	16
6007	Galway: Dominican Convent, Taylor's Hall	23	25	—	—	60	4	9	22
6305	Galway: Grammar School	2	7	4	2	26	13	5	9
6076	Galway: St. Ignace's College	13	9	13	—	45	16	6	16
6328	Galway: St. Joseph's Seminary	3	14	—	—	26	12	10	3
6327	Town: Christian Brothers' Schools	22	16	—	—	66	14	2	22
	Town: St. Joseph's College	25	16	16	11	124	16	4	25
6306	CO. MAYO: Ballina: St. Muredach's College	21	16	4	—	64	6	10	21
6302	Castlebar: St. Gerald's College	15	21	—	—	65	2	6	15
6373	Killliska: St. Louis' Convent	20	20	—	7	127	12	1	20
	Westport: Christian Brothers' Schools	20	15	—	—	36	19	2	20
6368	CO. DOWN: Rathfriland: Diocesan College	25	13	16	—	75	0	4	25

[219]

SECONDARY SCHOOLS, &c.—continued.

MANUAL INSTRUCTION					DOMESTIC ECONOMY					Total Amount of Grants	No. of School
No. of Students recognized for Grants				Amount of Grants	No. of Students recognized for Grants				Amount of Grants		
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
—	—	—	—	£ s. d.	15	8	12	2	71 10 10	215 8 8	6225
—	—	—	—	—	—	—	—	—	—	15 0 2	6218
12	—	—	—	3 12 8	—	—	—	—	—	30 4 0	6195
—	—	—	—	—	8	—	21	4	20 8 3	318 1 10	6225
—	—	—	—	—	—	—	—	—	—	186 9 2	6274
—	—	—	—	—	—	—	—	—	—	48 13 7	6229
—	—	—	—	—	—	—	—	—	—	80 8 7	6128
—	—	—	—	—	—	—	—	—	—	31 15 2	6098
—	—	—	—	—	—	—	—	—	—	70 10 4	6231
—	—	—	—	—	—	—	—	—	—	41 15 10	6040
—	—	—	—	—	—	—	—	—	—	189 2 10	6276
—	—	—	—	—	—	—	—	—	—	116 4 10	6169
—	—	—	—	—	—	—	—	—	—	63 13 4	6053
—	—	—	—	—	11	—	7	3	39 13 1	134 8 8	6211
542	125	53	—	282 14 9	133	48	32	10	694 7 0	3,492 18 2	—
—	6	—	—	5 12 10	—	—	—	—	—	63 8 2	6039
—	—	—	—	—	29	—	19	1	25 16 2	110 4 1	6007
—	—	—	—	—	—	—	—	—	—	43 8 3	6245
—	—	—	—	—	—	—	—	—	—	52 14 11	6205
8	14	—	—	8 2 6	—	—	—	—	—	48 12 3	6074
22	16	—	—	16 9 81	—	—	—	—	—	180 13 6	6236
—	—	—	—	—	—	—	—	—	—	148 15 1	6157
8	—	—	—	2 17 7	—	—	—	—	—	72 18 3	6258
—	—	—	—	—	—	—	—	—	—	78 10 5	6098
—	—	—	—	—	14	—	18	1	37 9 0	165 19 5	6282
20	15	—	—	9 16 1	—	—	—	—	—	55 0 8	6273
—	—	—	—	—	—	—	—	—	—	12 8 9	6246

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCHOOL					DRAWING				
		No. of Students recognized for Grants				Grant	No. of Students recognized for Grants				Grant
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year	
	Co. SCHOOLS					E a d					E a d
6029	Scho: Grammar School, .	16	18	6	5	146 6 10	14	18	—	—	10 7 4
6141	Scho: Samaschke College	46	20	21	4	227 5 2	48	28	—	—	19 4 2
6218	Scho: Day Trades Prepa- ratory School	22	6	—	—	54 5 8	23	8	—	—	28 10 9
6127	Scho: Ursuline Convent	13	14	16	—	119 9 8	13	14	—	—	16 16 1
	TOTALS FOR CUNNINGHAM,	236	264	107	24	1,233 11 10	215	204	8	—	209 1 9
—	Totals for Leicester, .	1,511	1,751	737	509	5,156 6 8	2,512	1,741	175	51	1,556 17 8
—	Totals for Mureton, .	1,266	1,178	640	126	4,886 18 1	1,766	1,179	112	16	1,027 13 7
—	Totals for Usher, .	1,546	1,137	526	166	6,559 13 3	1,948	1,137	104	43	1,336 3 9
—	Totals for Connaught, (16 Schools).	324	384	187	28	1,322 11 10	325	384	8	—	360 1 9
—	TOTALS FOR IRELAND (276 Schools).	6,166	6,367	1,690	460	21,128 12 10	6,146	4,361	457	61	4,026 16 9

[221]

SECONDARY SCHOOLS, &c.—continued.

MANUAL INSTRUCTION				DOMESTIC ECONOMY				Total amount of Grants	No. of School		
No. of Students receiving for Grants				Grant	No. of Students receiving for Grants					Grant	
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year				4th Year
				£ s. d.					£ s. d.	£ s. d.	
—	—	—	—	—	—	—	—	—	115 14 3	8598	
—	9	—	—	8 9 4	—	—	—	—	249 18 6	8141	
23	8	—	—	21 5 10	—	—	—	—	184 2 0	6025	
—	—	—	—	—	9	15	—	—	14 1 5	1197	
79	11	—	—	77 4 7	83	18	21	2	36 3 8	1,298 1 10	—
234	258	69	—	423 8 1	145	59	204	58	561 1 9	16,027 17 2	—
529	247	9	—	348 8 11	187	57	138	38	419 11 7	8,594 10 2	—
243	128	35	—	285 14 2	113	48	83	19	304 7 0	4,492 15 2	—
76	71	—	—	77 4 7	62	15	21	2	89 3 3	1,892 1 10	—
1,464	707	82	—	1,251 13 9	499	192	455	117	1,365 4 6	27,714 7 4	—

TABLE IV.—LIST OF PRIMARY SCHOOLS showing the Grants paid by the Department during the Financial Year, 1st April, 1912—31st March, 1913, in respect of Instruction in Drawing and Manual Work.

No. of School	Name of School.	School Year ending	Grant for Drawing, Paid on average attendance of scholars		Grant for Manual Instruction.		Total Grant for Drawing and Manual Instruction.
			Average Attendance.	Amount of Grant.	No of scholars under Instruction.	Amount of Grant.	
LEINSTER.							
				£ s. d.		£ s. d.	£ s. d.
8170	Co. Carlow : Coblenz : Christian Brothers' School.	31.11.12	268	20 16 0	—	—	20 16 0
8156	Tellur : Bridgetine Convent	30.11.12	20	(a) 1 15 8	—	—	1 15 8
CO. DUBLIN :							
6226	Arden : Industrial School .	31.10.12	173	77 13 0	100	27 9 0	145 5 0
5381	Blackrock : Heath Industrial School.	31.11.12	80	(b) 6 13 4	43	9 10 2	16 3 6
6150	Kinsale : Christian Brothers' School.	31.11.12	248	24 10 0	—	—	24 10 0
5327	Monkstown : Cuington Park Industrial School.	31.11.12	157	15 14 0	16	21 6 8	37 0 8
CO. ROSCOMMON & DUBLIN :							
6882	Christian Brothers' School, Francis Street.	31.1.12	318	21 16 0	—	—	21 16 0
6246	Christian Brothers' School, Griffin Road	31.1.12	115	8 12 6	—	—	8 12 6
6240	Christian Brothers' School, Great Strand Street.	31.12.12	261	25 2 6	26	7 8 5	32 10 0
6182	Christian Brothers' School, James's Street	31.5.12	312	31 4 0	—	—	31 4 0
6219	Christian Brothers' School, Marino.	31.12.12	274	27 8 0	—	—	27 8 0
6130	Christian Brothers' School, North Brunswick Street	31.5.12	218	14 7 0	—	—	14 7 0
6132	Christian Brothers' School, North Brunswick Street	31.12.12	355	35 10 0	30	10 2 7	45 12 7
6216	Christian Brothers' School, St. Laurence O'Toole.	31.12.12	179	17 15 0	30	8 5 10	26 3 10
6322	Christian Brothers' School, St. Mary's Place.	31.12.12	254	26 8 0	22	6 2 7	32 10 7
6117	Christian Brothers' School, Spruce Street.	31.1.12	416	31 7 0	—	—	31 7 0
6244	Christian Brothers' School, Westland Row.	31.1.12	261	24 2 0	—	—	24 2 0
6145	O'Brien Institution.	31.12.12	93	2 12 0	—	—	2 12 0
6115	St. Vincent's Orphanage.	31.1.12	63	4 8 0	26	11 17 2	15 3 2
CO. KILDARE :							
6217	Ally : Christian Brothers' School.	31.1.12	126	12 12 0	—	—	12 12 0
6246	Ally : St. Mary's School, Convent of Mercy.	30.11.12	18	1 16 0	—	—	1 16 0
6241	Kilcock : Christian Brothers' School.	31.1.12	71	7 2 0	—	—	7 2 0
6225	Monasterevan : Christian Brothers' School.	31.1.12	78	8 5 0	—	—	8 5 0
6221	Nass : Christian Brothers' School.	31.1.12	109	6 2 8	—	—	6 2 8
CO. KILKENNY :							
6264	Callan : Christian Brothers' School.	30.11.12	94	7 1 0	—	—	7 1 0
6266	Kilcreany : Christian Brothers' School.	31.1.12	166	11 12 8	—	—	11 12 8
CO. LORRY :							
6103	Drogheda : Christian Brothers' School, Sunday Gate	31.10.12	120	18 10 0	—	—	18 10 0
6269	Drogheda : Christian Brothers' School, Westgate.	31.10.12	86	3 7 8	—	—	3 7 8
6178	Dundalk : Christian Brothers' School.	30.9.12	215	26 10 0	—	—	26 10 0

(a) 12 months' grant. (b) 10 months' grant.

[223]

TABLE IV.—LIST OF PRIMARY SCHOOLS—continued.

No. of School	Name of School	School Year ending	Grant for Drawing, Paid on average attendance of scholars		Grant for Manual Instruction.		Total Grant for Drawing and Manual Instruction.
			Average Attendance.	Amount of Grant.	No. of scholars under instruction.	Amount of Grant.	
				£ s. d.		£ s. d.	£ s. d.
6108	Co. MEATH: Kells: Christian Brothers' Schools.	31.10.12	158	13 10 0	—	—	13 10 0
6110	COBLEN'S COURT: Barryborough: Christian Brothers' Schools.	31.3.12	173	17 6 0	—	—	17 6 0
6092	FERRINGTON: Christian Brothers' Schools.	31.12.11	90	9 10 0	—	—	9 10 0
6081	Co. WEXFORD: Mullingar: Christian Brothers' Schools.	31.11.12	120	11 10 0	—	—	11 10 0
6104	Co. WEXFORD: Enniscorthy: Christian Brothers' Schools.	31.1.12	237	17 10 0	—	—	17 10 0
6099	Co. WEXFORD: Gore: Christian Brothers' Schools.	31.5.12	124	(a) 12 8 0	—	—	12 8 0
6101	New Ross: Christian Brothers' Schools.	31.1.12	126	9 0 0	—	—	9 0 0
6106	Woodford: Christian Brothers' Schools, George's Street.	31.1.12	198	7 10 0	—	—	7 0 0
6341	Woodford: Christian Brothers' Schools, Joseph St.	31.1.12	107	10 14 0	—	—	10 14 0
	VOYLES FOR LEINSTER.	—	7,140	605 14 10	403	344 2 4	809 17 2
	MUNSTER.						
6127	Co. CLARE: Ennis: Christian Brothers' Schools.	31.9.12	157	11 10 0	—	—	11 10 0
6093	Ennis: Christian Brothers' Schools.	31.9.12	77	7 14 0	—	—	7 14 0
6096	Kilrush: Christian Brothers' Schools.	31.10.12	71	5 0 0	—	—	5 0 0
6054	Co. COKE: Ballymore: Fisher School.	31.5.12	84	0 0 0	61	5 2 0	14 2 0
6060	Charleville: Christian Brothers' Schools.	31.12.12	87	5 14 0	—	—	5 14 0
6056	Charleville: St. Algeus Industrial School.	31.9.12	92	9 4 0	—	—	9 4 0
6040	Doneraile: Christian Brothers' Schools.	31.12.12	77	5 10 0	—	—	5 10 0
6087	Fenny: Christian Brothers' Schools.	31.1.12	120	15 0 0	—	—	15 0 0
6112	Midleton: Christian Brothers' Schools.	31.1.12	100	10 10 0	—	—	10 10 0
6119	Midleton: Christian Brothers' Schools.	31.1.12	129	9 12 0	—	—	9 12 0
6050	Upton: Dunsford Industrial School.	31.12.12	194	19 0 0	83	12 16 0	31 16 0
6028	Youghal: Christian Brothers' Schools.	31.1.12	108	15 14 0	—	—	15 14 0
6052	Co. BERKHAMPTON OF COKE: Christian Brothers' Schools, Hammer Street.	31.5.12	150	11 0 0	30	4 11 0	15 11 0
6012	Christian Brothers' Schools, Our Lady's Mount.	31.5.12	477	47 14 0	80	15 8 0	63 2 0
6064	Christian Brothers' Schools, Sullivan's Quay.	31.5.12	308	25 10 0	30	7 1 10	32 11 10
6034	Groomstown Industrial School.	31.5.12	181	15 0 0	44	11 10 0	26 10 0
6154	Co. KERRY: Dingle: Christian Brothers' Schools.	31.1.12	183	15 14 0	—	—	15 14 0
6179	Trillick: Christian Brothers' Schools.	31.1.12	186	15 0 0	—	—	15 0 0
6063	Trillick: St. Joseph's Industrial School.	31.1.12	93	5 10 0	20	4 6 10	14 4 10

(a) 15 months' grant.

TABLE IV.—LIST OF PRIMARY SCHOOLS.—continued.

No. of School	Name of School.	School Year ending	Grant for Dearing, Paid on average attendance of scholars		Grant for Manual Instruction.		Total Grant for Dearing and Manual Instruction.	
			Average Attendance.	Amount of Grant.	No. of scholars under instruction.	Amount of Grant.		
								£ s. d.
6184	Co. LIMERICK : Dean : Christian Brothers' School.	30.11.12	56	5 12 0	—	—	5 12 0	
6205	Gals : District Industrial School.	30.11.12	114	11 8 8	45	12 12 4	23 1 4	
6205	Co. ROSSIGNOL OF LIMERICK : Christian Brothers' School, St. John's.	30.11.12	155	15 10 0	—	—	15 10 0	
6206	Christian Brothers' School, St. Mary's.	30.11.12	282	28 4 0	—	—	28 4 0	
6207	Christian Brothers' School, St. Michael's.	30.11.12	130	9 15 0	—	—	9 15 0	
6168	Christian Brothers' School, Sexton Street.	30.11.12	453	23 10 0	—	—	23 10 0	
6208	Industrial School, Sexton Street.	30.11.12	171	17 2 0	48	17 14 10	34 16 10	
6044	Co. TIPPERRARY : Corkin-on-Deir : Christian Brothers' School, St. Mary's.	31.12.12	180	10 12 0	—	—	10 12 0	
6181	Corkin-on-Deir : Christian Brothers' School, Mount St. Nicholas.	31.12.12	181	16 2 0	—	—	16 2 0	
6209	Corkin-on-Deir : Convent of Mercy.	31.12.12	23	2 0 0	—	—	2 0 0	
6210	Corkin : Christian Brothers' School.	31.12.12	53	2 12 0	—	—	2 12 0	
6211	Glennah : Christian Brothers' School, St. Mary's.	31.12.12	135	10 2 8	—	—	10 2 8	
6134	Glennah : Christian Brothers' School, St. Peter & Paul.	31.12.12	163	19 4 0	—	—	19 4 0	
6212	Glennah : St. Joseph's Industrial School.	30.6.12	135	10 7 0	40	10 12 4	21 0 4	
6213	Kesh : Christian Brothers' School.	31.12.12	147	11 0 0	—	—	11 0 0	
6160	Thurles : Christian Brothers' School.	31.12.12	188	14 17 0	—	—	14 17 0	
6153	Tipperrary : Christian Brothers' School.	30.11.12	100	7 10 0	—	—	7 10 0	
6214	Co. WATERFORD : Dismeyvan : Christian Brothers' School.	31.12.12	146	10 10 0	—	—	10 10 0	
6215	Limerick : Christian Brothers' School.	31.12.12	78	5 17 0	—	—	5 17 0	
6216	Tremore : Christian Brothers' School.	31.12.12	71	5 3 0	—	—	5 3 0	
6118	Co. BOLDINGHAM WATERFORD : Christian Brothers' School, Mount Eden.	31.12.12	323	25 7 0	—	—	25 7 0	
6217	Christian Brothers' School, St. John's.	31.12.12	200	15 0 0	—	—	15 0 0	
6218	Christian Brothers' School, St. Patrick's.	31.12.12	33	3 3 0	—	—	3 3 0	
TOTALS FOR MUNSTER.			—	3,329	561 6 4	374	366 7 2	647 13 6
ULSTER.								
6219	Co. BONDROGHAN : Belmoral Industrial School.	30.9.12	228	24 12 0	—	—	24 12 0	
6220	Christian Brothers' School, St. Michael's.	30.9.12	112	11 4 0	—	—	11 4 0	
6221	Christian Brothers' School, St. Mary's.	30.9.12	173	12 10 0	—	—	12 10 0	
6222	Christian Brothers' School, St. Patrick's.	30.9.12	897	19 14 0	—	—	19 14 0	
6223	Malaga Protestant Reformatory.	30.9.12	31	8 2 8	73	21 12 0	29 12 0	
6224	Milltown : St. Patrick's Industrial School.	30.9.12	138	13 10 0	24	3 0 5	21 10 5	
6225	Co. ANTRIM : Armagh : Christian Brothers' School.	30.9.12	106	7 12 0	—	—	7 12 0	

[225]

TABLE IV.—LIST OF PRIMARY SCHOOLS.—continued.

No. of School.	Name of School.	School Year ending	Grant for Drawing, paid on average attendance of scholars.		Grant for Manual Instruction.		Total Grant for Drawing and Manual Instruction.
			Average Attendance.	Amount of Grant.	No. of scholars under Instruction.	Amount of Grant.	
				£ s. d.		£ s. d.	£ s. d.
6903	Co. DOWDAL : Killybegs : St. Columba's Industrial School.	31.5.19	134	18 8 0	57	138 7 10	51 15 10
6171	Co. DOWN : Newry : Christian Brothers' Schools.	30.8.19	250	25 0 0	—	—	25 0 0
6965	Co. DUBLIN OF LEINSTER : Christian Brothers' Schools, Broomfield Hill.	31.1.19	187	14 9 6	—	—	14 9 6
6126	Co. MONAGHAN : Monaghan : Christian Brothers' Schools.	30.11.19	137	11 16 0	—	—	11 16 0
5160	Co. TYRONE : Omagh : Christian Brothers' Schools.	31.12.19	99	9 18 0	—	—	9 18 0
	TOTALS FOR ULSTER,	—	1,675	171 19 0	346	56 2 8	279 1 8
	CONNAGHT.						
6337	Co. GALWAY : Galway : St. John's Industrial School.	31.10.19	200	20 0 0	95	28 9 5	48 9 5
6326	Letterfrack : St. Joseph's Industrial School.	30.8.19	143	16 6 0	46	17 13 10	31 19 10
6339	Town : Christian Brothers' Schools.	31.5.19	111	6 8 8	10	6 5 6	14 9 6
6276	Co. MAYO : Westport : Christian Brothers' Schools.	30.8.19	168	15 16 0	25	2 12 8	18 8 8
	TOTALS FOR CONNAGHT,	—	612	58 8 8	106	53 5 11	111 14 5
SUMMARY.							
	TOTALS FOR LEINSTER (33 Schools),		7,166	665 14 10	653	166 9 6	889 17 2
	TOTALS FOR MUNSTER (43 Schools),		8,389	641 8 6	376	106 7 3	847 15 9
	TOTALS FOR ULSTER (12 Schools),		1,674	171 19 0	346	56 2 8	279 1 8
	(TOTALS FOR CONNAGHT (4 Schools),		612	58 8 8	106	53 5 11	111 14 5
	TOTALS FOR IRELAND (96 Schools),		15,971	1,437 19 16	1,365	461 16 2	1,632 9 6

TABLE V.—STATEMENT showing the OCCUPATIONS of STUDENTS attending Schools and Classes conducted under the conditions of Schemes of Technical Instruction in Non-Agricultural Subjects.

URBAN SCHEMES.

LEINSTER.

	Dublin.	Belinmore and Rathfriland.	Peasbrook.	Thurston.	Donabola.	Wentford.	Blackrock.	May.	Attitude.	New Ross.	Kinsbury.	Totals for Leinster.
Number of individual students enrolled.	5,297	808	545	431	368	213	205	153	178	157	162	5,639
Number situated in:—												
Preparatory Classes.	100	20	28	51	45	29	30	79	27	41	48	460
Commercial Classes (including Languages Classes).	838	410	16	74	130	53	76	39	78	28	55	1,512
Science (Pure and Applied) and Mathematics Classes.	645	—	205	51	79	23	35	4	—	8	34	1,305
Handicraft Classes.	25	—	45	—	—	27	8	—	10	34	35	174
Domestic Science Classes.	335	197	135	913	150	47	45	65	—	20	—	1,295
Art Classes.	67	—	—	31	46	30	14	3	—	11	41	236
Classes in Lace and Crochet Making, Embroidery, Appliqué, Sewing-Machine Work, &c.	—	—	67	—	—	—	34	—	—	—	—	201
OCCUPATIONS OF STUDENTS.												
Young Men.												
Persons engaged in various occupations, Building Trades, including Workmen in Wood, &c.	—	—	—	4	3	1	5	20	—	6	7	36
Carpenter and Car Builders.	115	—	8	9	19	3	—	5	—	8	22	100
Engineers, Workmen in Metal, Blacksmiths, &c.	73	—	—	1	1	—	—	1	—	—	1	23
Architects, Surveyors, Civil Engineers, &c.	200	3	40	—	9	17	5	3	2	—	—	345
Electrical Engineers, Scientific Instrument Makers, &c.	13	—	2	—	—	—	—	—	—	—	—	15
Printing Trades—Compositors, Lithographers, &c.	10	2	5	—	—	—	2	—	—	—	—	19
Textile Industries—Designers, Weavers, &c.	64	—	1	—	2	1	—	—	7	—	2	107
Furniture, Decorators, &c.	—	3	4	—	10	—	—	—	—	—	—	13
Painters, Glaziers, &c.	28	—	—	—	17	5	1	—	—	—	—	43
Trades Involving Applied Art—Jewellers, Furniture Makers, &c.	27	4	—	—	1	—	—	1	1	—	—	40
Chemists, Analysts, Druggists, &c.	46	—	—	—	3	—	1	—	—	—	—	54
Salmon, Shopkeepers, Warehousemen, &c.	43	5	10	4	23	8	2	9	9	11	—	176
Clerks in Commercial Offices.	214	168	10	17	15	15	8	9	7	4	—	474
Officers in Banks, Civil Service, Law, Agriculture, and Agricultural Offices.	54	120	15	—	5	9	7	—	4	2	1	213
Teachers, Assistant Teachers, Pupil Teachers, &c.	33	7	1	—	3	5	5	—	—	1	—	58
Students (University, Law, Medical), Occupations not included in the above Classes.	62	—	—	—	3	—	—	—	7	10	—	79
Persons just left School or College, Boys still in attendance at School or College, No occupation stated.	629	1	63	8	4	7	14	—	7	10	—	695
Persons just left School or College, Boys still in attendance at School or College, No occupation stated.	41	—	—	—	6	—	9	—	—	—	—	59
Persons just left School or College, Boys still in attendance at School or College, No occupation stated.	102	5	85	6	4	31	3	15	13	—	—	163
Persons just left School or College, Boys still in attendance at School or College, No occupation stated.	102	56	14	21	—	1	5	8	—	—	3	159
Total Number of Young Men.	3,601	329	343	57	116	83	65	65	66	62	121	5,633
Young Women.												
Persons engaged in various occupations, Domestic Services.	—	—	18	—	—	1	—	—	3	—	—	22
Printing Trades.	—	48	18	77	16	—	—	19	—	8	—	202
Designers, Milliners, &c.	30	10	12	5	—	—	—	9	—	—	—	66
Textile Industries—Designers, Weavers, &c.	1	24	—	—	—	—	—	—	—	—	—	25
Furniture, Decorators, &c.	16	9	1	—	—	1	5	—	—	—	—	37
Trades Involving Applied Art—Jewellers, Furniture Makers, &c.	—	1	—	—	—	—	—	—	—	—	—	1
Salmon, Shopkeepers, &c.	44	31	8	14	35	15	8	10	27	4	10	210
Clerks, Cashiers, Civil Servants, &c.	130	91	9	35	20	15	15	7	12	7	7	310
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical), Occupations not included in above Classes.	44	29	6	13	25	20	17	0	3	3	1	238
Persons just left School or College, Girls still in attendance at School or College, No occupation stated.	59	17	22	8	7	25	19	24	25	1	—	239
Persons just left School or College, Girls still in attendance at School or College, No occupation stated.	798	190	115	292	90	37	13	24	8	—	—	1,260
Total Number of Young Women.	884	473	320	344	389	130	136	86	119	85	31	2,466
Total Number of Students.	5,297	800	563	491	305	213	202	153	178	157	162	5,639

[227]

TABLE V.—continued.
 URBAN SCHEMES—continued.
 MUNNICH AND COMSATON.

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals for Month.	Girls	Totals for Courses.
Number of individual students enrolled.	1,365	425	422	515	436	127	4,095	240	226
Number enrolled in:—									
Proprietary Course Classes.	164	185	21	49	157	26	512	43	66
Commercial Class (including Languages Classes).	166	128	191	194	248	24	946	88	94
Science (Pure and Applied) and Mathematics Classes.	370	285	193	65	45	50	1,213	47	26
Handicraft Classes.	45	—	25	—	5	5	80	12	66
Domestic Science Classes.	453	692	174	97	13	38	1,494	145	145
Art Classes.	127	174	98	91	71	5	579	45	41
Classes in Lace and Quilt Making, Embroidery, Spinning, Sewing, Turned Work, &c.	255	85	16	46	—	—	364	—	—
Occupations of Students.									
Young Men.									
Persons engaged in Various Occupations.	18	1	1	2	2	—	24	12	1
Building Trades, including Workers in Wood, &c.	61	86	15	8	27	7	184	18	11
Cash and Car Drivers.	4	4	3	22	—	—	33	—	1
Engineers, Workers in Metal, Draughtsmen, &c.	41	48	15	7	15	20	146	6	10
Architects, Surveyors, Civil Engineers, &c.	15	4	4	4	4	—	35	—	5
Electrical Engineers, Scientific Instrument Makers, &c.	13	6	3	1	—	7	30	—	—
Printing Trades—Compositors, Lithographers, &c.	68	—	5	5	—	—	88	8	6
Textile Industries—Designers, Weavers, &c.	3	17	—	—	—	—	20	—	—
Painters, Decorators, &c.	19	34	—	4	3	—	60	—	6
Plumbers, Gasfitters, &c.	16	15	13	3	4	3	54	3	6
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	22	4	4	4	1	—	35	3	17
Chefs, Waiters, Dressmakers, &c.	20	7	11	2	—	—	40	1	1
Salesmen, Shopkeepers, Warehousemen, &c.	67	15	14	14	14	—	124	10	10
Clerks in Commercial Offices.	182	51	37	11	47	7	315	21	10
Clerks in Banks, Civil Service, Law, Assurance, and Accountancy Offices.	59	21	26	5	—	—	111	10	11
Teachers, Assistant Teachers, Pupil Teachers, &c.	73	29	19	5	26	—	143	18	5
Students (University, Law, Medical, &c.)	33	—	—	2	2	—	37	17	4
Occupations not included in the above.	93	50	12	7	5	36	193	10	7
Boys just left School or College.	65	11	—	1	5	—	82	4	11
Boys still in attendance at School or College.	37	18	39	14	1	—	109	—	9
No occupation stated.	77	13	12	4	—	8	114	—	—
Total Number of Young Men.	946	265	206	110	100	95	1,719	124	122
Young Women.									
Persons engaged in Various Occupations.	—	—	—	—	—	—	—	—	—
Domestic Service.	27	6	29	6	2	6	76	8	26
Printing Trades.	—	—	—	—	—	—	—	—	—
Dressmakers, Milliners, &c.	46	36	1	28	6	—	117	9	24
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—	—	—	—
Factory Workers not included in above.	10	5	—	—	—	—	15	1	7
Workers in Lace, Crochet, Embroidery, Spinning, Draw Thread Work, &c.	129	145	1	46	8	—	329	—	—
Saleswomen, Shopkeepers, &c.	65	21	15	12	12	7	122	10	14
Clerks, Cashiers, Civil Servants, &c.	45	20	14	11	22	4	116	10	10
Teachers, Assistant Teachers, Pupil Teachers.	24	65	25	7	70	7	228	24	27
Students (University, Medical, &c.)	4	—	—	—	—	—	4	—	—
Occupations not included in above Classes.	87	21	11	19	7	4	152	8	26
Girls just left School or College.	20	49	—	5	21	4	100	6	6
Girls still in attendance at School or College.	49	16	22	23	23	—	133	—	46
No occupation stated.	556	95	120	47	45	6	879	42	8
Total Number of Young Women.	1,615	479	246	202	236	61	2,845	116	126
Total Number of Students.	1,365	625	462	416	436	127	4,095	240	226

TABLE V—continued.—URBAN

	Boys.	Leeds.	Sheff.	Leam. (Municipal School).	Leam. (Convent School).	Ballymena.	Perth.	Northampton.	Amst.	Coleridge.
Number of individual students enrolled.	6,371	540	320	338	113	451	355	250	276	304
Number enrolled in—										
Preparatory Classes.	1,094	79	64	65	17	36	12	23	16	51
Commercial Classes (including Languages).	1,437	31	111	69	56	136	183	92	134	104
Science (Pure and Applied) and Mathematics Classes.	1,350	102	43	79	—	64	44	39	12	46
Handicraft Classes.	474	—	13	—	—	3	15	—	—	7
Domestic Science Classes.	1,690	241	24	11	61	163	124	125	49	207
Art Classes.	415	16	24	12	14	39	—	11	11	22
Classes in Lace and Crochet Making.	25	—	22	—	—	—	—	—	—	—
Embroidery, Applique, Drawn-Thread Work, &c.	—	—	—	—	—	—	—	—	—	—
Other Classes.	563	—	—	—	—	—	—	—	—	—
CONTINUANCE OF STUDENT.										
Young Men.										
Persons engaged in Farming Occupations.	1	2	—	5	1	3	—	—	14	14
Building Trades, including Workers in Wood, &c.	163	4	25	9	—	13	3	2	12	1
Coach and Car Builders.	4	1	10	—	—	2	—	—	—	—
Engineers, Workmen in Metal, Draughtsmen, &c.	146	39	16	5	—	9	9	16	4	15
Architects, Surveyors, Civil Engineers, &c.	41	2	1	—	—	2	—	—	2	3
Electrical Engineers, Scientific Instrument Makers, &c.	62	4	—	—	—	2	3	—	—	—
Printing Trades—Compositors, Lithographers, &c.	96	—	—	1	—	—	—	—	—	2
Textile Industries—Designers, Weavers, &c.	161	—	9	15	—	9	10	19	—	9
Painters, Decorators, &c.	52	7	1	3	—	1	2	2	—	—
Physicians, Quacks, &c.	45	5	1	—	—	—	—	—	—	3
Trades Involving Applied Art—Jewellers, Furniture Makers, &c.	56	6	1	—	—	2	—	1	—	—
Chemists, Analysts, Druggists, &c.	194	6	9	1	—	5	1	—	—	2
Salesmen, Shopkeepers, Warehousemen, &c.	315	17	13	15	—	37	9	6	4	16
Clerks in Commercial Offices.	785	31	14	1	—	9	20	13	3	19
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	353	5	3	16	—	13	—	—	11	5
Teachers, Assistant Teachers, Pupil Teachers, &c.	119	13	12	1	26	10	5	5	5	3
Students (University, Law, Medical).	53	4	—	—	—	—	—	—	3	1
Occupations not included in the above Classes.	96	23	14	9	—	13	6	17	7	5
Boys just left School or College.	—	—	8	5	—	16	—	—	—	3
Boys still in attendance at School or College.	16	2	—	10	1	1	5	—	25	25
No occupation stated.	175	16	5	9	—	2	17	1	—	2
Total Number of Young Men.	3,356	191	82	156	1	161	105	63	116	112
Young Women.										
Persons engaged in Farming Occupations.	—	—	3	—	—	—	—	—	—	15
Domestic Servants.	150	—	—	6	3	0	—	—	—	14
Printing Trades.	4	—	—	—	—	—	—	—	—	—
Dressmakers, Milliners, &c.	155	7	12	14	—	26	17	7	10	15
Textile Industries—Designers, Weavers, &c.	247	—	48	4	—	34	25	11	6	4
Factory Workers in Lace, Crochet, Embroidery, Sewing, Drawn-Thread Work, &c.	119	20	10	27	20	16	3	12	—	9
—	21	—	—	—	—	1	—	—	—	1
Saleswomen, Shopkeepers, &c.	155	37	10	10	4	7	26	4	16	10
Clerks, Cashiers, Civil Servants, &c.	306	45	16	16	—	25	18	14	14	20
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical).	261	21	24	10	9	16	48	17	25	25
Occupations not included in above Classes.	43	5	1	—	—	—	—	—	—	5
Girls just left School or College.	—	—	6	3	41	2	4	—	—	22
Girls still in attendance at School or College.	27	6	1	7	1	1	10	—	21	11
No occupation stated.	1,156	161	10	63	—	76	40	24	53	29
Total Number of Young Women.	2,665	349	212	171	466	321	240	167	166	192
Total Number of Students.	6,021	540	312	327	113	473	355	250	276	306

[229]

SCHEMES—continued.—Urbana.

Laces.	Knives.	Bookbinders.	Cards/engraving.	Holy wood.	Madras/Urban and Rural.	Dressmakers.	Wares/paint.	Totals for Urban.	
399	399	354	393	73	356	191	79	10,925	Number of individual students enrolled
24	26	43	27	3	91	19	19	1,251	Number enrolled in—
121	55	52	30	10	49	39	13	2,752	Preparatory Course Classes
75	14	19	31	5	54	—	—	1,557	Commercial Classes (including Languages Classes)
7	5	—	27	—	29	—	—	105	Science (Pure and Applied) and Mathematics Classes
115	119	342	50	22	73	45	69	8,731	Handicraft Classes
15	—	—	5	12	—	—	—	341	Domestic Science Classes
44	—	—	—	—	—	—	—	144	Art Classes
—	—	—	—	—	—	—	—	465	Classes in Lace and Crochet Making, Embroidery, Spinning, Drawn-Thread Work, &c.
—	—	—	—	—	—	—	—	—	Other Classes
									OCCUPATIONS OF STUDENTS.
									Young Men.
2	—	5	3	1	33	1	—	53	Persons engaged in Farming Occupations
—	—	—	17	—	18	—	1	330	Building Trades, including Workers in Wood, &c.
10	2	2	15	4	—	—	—	1	Cash and Car Builders
1	—	—	—	—	—	—	—	315	Engineers, Workers in Metal, Draughtsmen &c.
2	2	1	2	—	1	—	—	55	Architects, Surveyors, Civil Engineers, &c.
12	—	94	10	—	—	—	—	94	Electrical Engineers, Scientific Instrument Makers, &c.
3	—	2	—	—	—	—	—	103	Printing Trades—Compositors, Lithographers, &c.
1	2	—	1	—	—	—	—	55	Textile Industries—Designers, Weavers, &c.
—	9	1	—	—	3	—	—	38	Painters, Decorators, &c.
35	21	8	10	—	14	19	1	55	Plumbers, Carpenters, &c.
35	3	9	—	—	10	4	—	67	Trades Involving Applied Art—Jewellers, Furniture Makers, &c.
10	5	—	5	—	3	—	—	126	Chemists, Analysts, Druggists, &c.
4	—	1	1	—	—	1	—	437	Salmon, Shoptenders, Warehousemen, &c.
5	2	1	19	2	21	9	7	861	Clerks in Commercial Offices
15	5	4	—	—	5	—	5	225	Clerks in Banks, Civil Service, Law Agencies, and Accountants' Offices
8	3	—	23	—	—	3	—	225	Teachers, Assistant Teachers, Pupils Teachers, &c.
—	1	—	—	—	—	4	—	54	Students (University, Law, Medical)
125	32	71	120	50	199	31	51	541	Occupations not included in the above Classes
									Boys just left School or College
									Boys still in attendance at School or College
									No occupation stated.
125	32	71	120	50	199	31	51	4,994	Total Number of Young Men
									Young Women.
3	—	13	7	1	25	—	—	55	Persons engaged in Farming Occupations
11	15	—	4	13	10	9	8	975	Domestic Services
15	2	19	8	1	15	2	9	19	Printing Trades
19	36	65	2	—	—	—	—	417	Dressmakers, Milliners, &c.
—	—	—	—	1	—	—	—	438	Textile Industries—Designers, Weavers, &c.
20	4	10	10	5	10	—	2	437	Factory Workers not included in above
35	13	17	23	5	5	—	—	35	Classes in Lace, Crochet, Embroidery
35	5	17	17	2	31	7	5	313	Spinning, Drawn-Thread Work, &c.
4	4	49	25	—	19	33	36	522	Salmon, Shoptenders, Warehousemen, &c.
40	15	3	—	—	2	—	—	552	Clerks, Checkers, Civil Servants, &c.
17	1	—	—	—	—	—	—	779	Teachers, Assistant Teachers, Pupils Teachers
19	31	—	—	31	—	—	—	69	Students (University, Medical)
—	—	—	—	—	—	—	—	265	Occupations not included in above Classes
—	—	—	—	—	—	—	—	145	Girls just left School or College
—	—	—	—	—	—	—	—	227	Girls still in attendance at School or College
—	—	—	—	—	—	—	—	1,757	No occupation stated.
203	153	283	161	58	324	79	61	8,866	Total Number of Young Women.
329	369	554	335	73	335	161	79	10,929	Total Number of Students.

TABLE V.—continued.
COUNTY SCHEMES—PERMANENT CENTRES OF INSTRUCTION.

LEINSTER.

	Cadiz.	Dublin.	Kildare.	Kilkenny.	Kilkenny.	Longford.	Louth.	Meath.	Queen's Co.	Wicklow.	Total for Leinster.
Number of individual students enrolled.	156	307	316	161	469	—	402	266	101	174	2,367
Number enrolled in—											
Preparatory Classes.	—	—	97	20	59	—	55	35	10	10	204
Commercial Classes (including Languages Classes).	92	165	152	20	168	—	137	54	24	90	567
Science (Pure and Applied) and Mathematics Classes.	—	—	71	9	33	—	121	17	10	6	352
Handicraft Classes.	26	73	47	16	39	—	14	—	18	14	284
Domestic Science Classes.	42	139	43	66	135	—	53	54	42	99	709
Art Classes.	—	—	32	24	11	—	69	—	—	—	135
Classes in Lace and Crochet Making, Embroidery, Sticking, Sewing, Thread Work, &c.	—	—	—	—	—	—	—	—	—	—	—
OCCUPATIONS OF STUDENTS.											
Young Men.											
Persons engaged in Farming Occupations.	3	19	55	—	19	—	3	1	14	—	67
Building Trades, including Workers in Wood, &c.	9	6	13	3	14	—	10	4	—	—	53
Cloth and Car Builders.	—	—	2	—	1	—	—	—	—	—	3
Engineers, Workers in Metal, Druggists, &c.	—	1	4	—	—	—	26	—	1	—	32
Architects, Surveyors, Civil Engineers, &c.	—	—	1	—	1	—	—	2	—	—	4
Electrical Engineers, Scientific Instrument Makers, &c.	—	—	—	—	—	—	5	—	—	—	5
Printing Trades—Compositors, Lithographers, &c.	2	25	4	1	—	—	1	1	—	—	33
Textile Industries—Designers, Weavers, &c.	1	—	—	—	4	—	—	—	—	—	5
Fashion, Dressmakers, &c.	—	—	1	—	—	—	2	—	—	—	2
Perfumers, Hairdressers, &c.	—	—	1	—	—	—	—	—	—	—	1
Trades Involving Applied Art—Jewellers, Furniture Makers, &c.	2	—	—	—	—	—	—	—	—	—	2
Chemists, Analysts, Druggists, &c.	—	—	1	—	—	—	—	—	—	—	1
Salmon, Shellfish, Warehouses, &c.	2	2	27	18	32	—	11	5	—	—	75
Offices in Commercial Offices.	18	28	6	4	45	—	33	1	—	—	135
Offices in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	1	—	12	1	12	—	4	—	—	—	29
Teachers, Assistant Teachers, Pupil Teachers, &c.	4	6	15	5	12	—	50	8	17	1	116
Students (University, Law, Medical).	—	—	—	—	—	—	2	—	—	—	2
Occupations not included in the above Classes.	6	11	6	9	15	—	10	11	5	13	74
Boys just left School or College.	—	17	28	9	14	—	6	—	1	—	75
Boys still in attendance at School or College.	21	21	2	4	13	—	12	19	1	25	100
No occupation stated.	—	25	—	1	3	—	8	11	—	4	51
Total Number of Young Men.	75	180	171	61	197	—	299	80	49	73	1,355
Young Women.											
Persons engaged in Farming Occupations.	1	—	—	2	3	—	—	—	—	—	6
Domestic Services.	13	24	5	—	26	—	17	12	3	5	103
Printing Trades.	—	—	—	—	—	—	—	—	—	—	—
Dressmakers, Milliners, &c.	10	14	7	—	16	—	17	15	3	5	73
Textile Industries—Designers, Weavers, &c.	—	—	16	—	—	—	—	—	—	—	16
Factory Workers not included in above.	16	3	—	—	—	—	—	—	—	—	19
Workers in Lace, Crochet, Knitwear, &c.	—	9	—	—	—	—	—	—	—	—	9
Springing, Driven-Thread Work, &c.	—	—	—	—	—	—	—	—	—	—	—
Salmon, Shellfish, Warehouses, &c.	9	6	12	5	30	—	19	4	4	—	84
Offices in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	19	25	25	5	45	—	14	2	1	—	121
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical).	—	—	—	—	—	—	—	—	—	—	—
Occupations not included in above Classes.	25	6	60	9	74	—	37	2	14	—	218
Girls just left School or College.	16	3	—	1	23	—	9	—	—	—	49
Girls still in attendance at School or College.	7	—	10	—	—	—	12	14	10	—	43
No occupation stated.	—	17	—	—	79	—	23	22	5	—	127
Total Number of Young Women.	119	144	142	109	272	—	303	89	52	162	1,251
Total Number of Students.	195	324	313	170	469	—	602	169	101	174	2,596

TABLE V.—continued.
COUNTY SCHEMES—PERMANENT CENTRES OF INSTRUCTION—continued.
MUNSTER.

	Class.	Cook.	Kerr.	Librarian.	Typewriter (M. Edition)	Typewriter (G. Edition)	Typewriter (H. Urban and Rural).	Wetland.	Total for Munster.
Number of individual students enrolled.	239	1,330	175	69	385	96	164	183	2,944
Number enrolled in:—									
Preparatory Classes.	—	11	—	—	—	—	—	—	11
Commercial Classes (including Language Classes).	96	233	36	—	30	—	—	—	602
Science (Pure and Applied) and Mathematics Classes.	—	341	15	—	24	—	—	—	445
Handicraft Classes.	51	351	75	—	49	55	15	—	674
Domestic Science Classes.	—	—	—	—	—	—	—	—	—
Art Classes.	—	943	21	—	—	—	—	—	1,011
Classes in Lace and Crochet Making, Embroidery, Springing, Drawn Thread Work, &c.	—	12	45	69	71	33	—	—	337
OCCUPATIONS OF STUDENTS.									
Young Men.									
Persons engaged in Various Occupations.	13	73	4	—	42	—	9	6	140
Building Trades, including Workers in Wood, &c.	12	139	10	—	5	10	1	14	199
Coach and Car Builders.	—	15	—	—	—	—	—	—	15
Engineers, Workers in Metal, Devising, &c.	1	44	—	—	—	—	1	3	49
Architects, Surveyors, Civil Engineers, &c.	—	1	—	—	—	—	—	—	1
Electrical Engineers, Scientific Instrument Makers, &c.	—	—	—	—	—	—	—	—	—
Printing Trades—Composition, Lithography, &c.	—	1	—	—	4	—	—	1	6
Textile Industries—Designers, Weavers, &c.	—	9	1	—	—	—	—	—	10
Painters, Decorators, &c.	—	7	—	—	—	—	—	—	7
Furniture Makers, &c.	—	1	—	—	3	—	—	—	4
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	—	4	—	—	—	—	—	—	4
Chemists, Analysts, Druggists, &c.	—	5	—	—	—	—	—	—	5
Salesmen, Shopkeepers, Warmstokers, &c.	16	95	4	—	30	—	12	—	173
Clerks in Commercial Offices.	14	25	—	—	13	—	—	—	50
Clerks in Banks, Civil Service, Law, Agriculture, and Accountants' Offices.	—	11	1	—	—	—	—	—	12
Teachers, Assistant Teachers, Pupil Teachers, &c.	1	25	15	—	5	4	1	7	73
Students (University, Law, Medical).	—	12	—	—	—	—	—	—	12
Occupations not included in the above.	5	54	7	—	45	8	13	34	171
Bore (not left School or College).	—	6	—	—	—	—	4	—	10
Bore still in attendance at School or College.	37	591	45	—	32	30	13	46	682
No occupation stated.	9	1	1	—	20	—	13	10	50
Total Number of Young Men.	112	923	99	—	260	54	75	105	1,644
Young Women.									
Persons engaged in Various Occupations.	25	1	—	—	0	—	—	—	26
Domestic Service.	—	1	—	—	—	—	—	—	1
Printing Trades.	—	—	—	—	—	—	—	—	—
Dressmakers, Milliners, &c.	4	12	—	—	—	—	—	—	16
Textile Industries—Designers, Weavers, &c.	—	1	—	—	—	—	—	—	1
Factory Workers not included in above.	—	—	—	—	—	—	—	—	—
Workers in Lace, Crochet, Embroidery, &c.	—	94	45	—	78	—	—	—	217
Springing, Drawn Thread Work, &c.	—	—	—	—	—	—	—	—	—
Salesmen, Shopkeepers, &c.	25	67	—	—	30	—	15	—	137
Clerks, Cashiers, Civil Servants, &c.	—	8	—	—	—	—	—	—	8
Teachers, Assistant Teachers, Pupil Teachers.	1	43	22	—	15	—	5	—	121
Students (University, Medical).	—	5	—	—	—	—	—	—	5
Occupations not included in above Classes.	10	25	—	—	—	—	—	—	35
Girls just left School or College.	—	11	—	—	—	—	—	—	11
Girls still in attendance at School or College.	19	148	11	—	—	35	23	—	237
No occupation stated.	7	26	—	—	—	13	24	—	143
Total Number of Young Women.	122	407	79	—	149	49	115	18	1,904
Total Number of Students.	239	1,330	175	69	409	96	194	123	2,944

TABLE V.—continued
COUNTY SCHEMES—PERMANENT CENTRES OF INSTRUCTION—continued.
ULSTER.

	Azusa.	Armagh.	Cavan.	Down.	Dumfries.	Fermanagh.	Londonberry.	Monaghan.	Tyrone.	Totals for Ulster.
Number of individual students enrolled.	351	45	326	469	253	558	670	378	556	2,497
Number enrolled in—										
Preparatory Classes.	54	—	—	—	54	17	73	—	100	235
Commercial Classes (including Languages Classes).	228	—	—	—	70	31	82	143	236	710
Science (Pure and Applied) and Mathematical Classes.	57	—	—	—	74	28	—	—	113	226
Handicraft Classes.	58	—	—	—	42	—	71	—	—	169
Domestic Science Classes.	191	—	—	—	54	75	255	—	113	719
Art Classes.	6	—	—	—	—	29	34	—	—	161
Classes in Lace and Crochet Making, Embroidery, Springing, Drawn-Thread Work, &c.	—	42	230	489	—	418	95	105	—	1,469
Occupations of Students.										
Young Men.										
Persons engaged in Farming Occupations.	95	—	—	—	97	3	69	—	23	148
Building Trades, including Workmen in Wood, &c.	3	—	—	—	14	5	7	—	13	34
Cloth and Dry Building.	2	—	—	—	—	—	—	—	—	2
Millwrights, Workmen in Metal, Druggists, &c.	14	—	—	—	4	1	—	—	—	19
Architects, Surveyors, Civil Engineers, &c.	—	—	—	—	3	—	—	—	4	7
Electrical Engineers, Scientific Instrument Makers, &c.	—	—	—	—	—	3	—	—	—	3
Printing Trades—Composition, Lithography, &c.	3	—	—	—	1	1	—	—	—	5
Textile Industries—Designers, Weavers, &c.	13	—	—	—	—	—	1	—	3	16
Painters, Decorators, &c.	3	—	—	—	—	—	1	—	—	4
Plumbers, Gasfitters, &c.	—	—	—	—	4	1	1	—	3	9
Trades Involving Applied Art—Jewellers, Furniture Makers, &c.	—	—	—	—	1	—	—	—	—	1
Chemists, Analysts, Druggists, &c.	4	—	—	—	—	—	—	—	—	4
Salesmen, Shopkeepers, Warehousemen, &c.	25	—	—	—	14	19	29	45	41	170
Clerks in Commercial Offices.	12	—	—	—	6	—	13	6	14	54
Clerks in Banks, Civil Service, Law, Assizes, and Accountants' Offices.	8	—	—	—	6	9	6	—	12	41
Teachers, Assistant Teachers, Pupil Teachers, &c.	6	—	—	—	—	—	3	3	26	40
Students (University, Law, Medical).	1	—	—	—	—	—	1	—	—	2
Occupations not included in the above Classes.	8	—	—	—	19	2	5	2	5	37
Boys just left School or College.	3	—	—	—	2	—	0	—	—	5
Boys still in attendance at School or College.	28	—	—	—	39	1	46	—	39	153
No occupation stated.	11	—	—	—	5	2	—	—	—	18
Total Number of Young Men.	133	—	—	—	133	40	207	57	208	654
Young Women.										
Persons engaged in Farming Occupations.	17	—	—	434	10	—	58	—	119	628
Domestic Servants.	19	—	—	—	11	11	—	—	13	53
Printing Trades.	—	—	—	—	—	—	—	—	—	—
Druggists, Milliners, &c.	6	—	—	—	7	3	13	3	5	34
Textile Industries—Designers, Weavers, &c.	14	—	—	—	—	—	—	—	—	14
Factory Workmen not included in above.	—	—	—	—	—	—	—	—	—	—
Workers in Lace, Crochet, Embroidery, Springing, Drawn-Thread Work, &c.	—	42	339	—	—	458	94	57	—	922
Saleswomen, Shopkeepers, &c.	10	—	—	—	8	1	3	23	16	57
Clerks, Costlers, Civil Service, &c.	12	—	—	—	0	2	8	14	54	88
Teachers, Assistant Teachers, Pupil Teachers, &c.	15	—	—	—	11	8	22	1	45	109
Students (University, Medical).	3	—	—	—	—	—	—	—	—	3
Occupations not included in above Classes.	2	—	—	—	4	5	87	4	—	102
Girls just left School or College.	13	—	—	10	2	—	3	—	—	28
Girls still in attendance at School or College.	14	—	—	35	1	—	114	13	30	229
No occupation stated.	138	—	—	—	60	45	2	23	4	278
Total Number of Young Women.	396	42	339	449	120	547	414	245	278	2,643
Total Number of Students.	483	42	339	489	253	558	670	383	836	3,497

[233]

TABLE V.—continued.
COUNTY SCHEMES—PERMANENT CENTERS OF INSTRUCTION—continued.
CONTAHUTE.

	Gaiher.	Letina.	Mayo.	Roseman.	Sligo.	Totals for Conatahute.
Number of individual students enrolled, Number enrolled in—	133	—	635	193	—	961
Preparatory Course Classes, . . .	29	—	—	—	—	29
Commercial Classes (including Lan- guage Classes), . . .	67	—	135	193	—	445
Science (Pure and Applied) and Mathe- matics Classes, . . .	15	—	—	—	—	15
Handicraft Classes, . . .	25	—	27	—	—	119
Domestic Science Classes, . . .	61	—	215	—	—	296
Art Classes, . . .	16	—	—	—	—	16
Classes in Lace and Crochet Making, Embroidery, Spooling, Driven- Thread Work, &c., . . .	—	—	991	—	—	101
OCCUPATIONS OF STUDENTS.						
Young Men.						
Persons engaged in Farming Occupations, . . .	8	—	43	11	—	62
Building Trades, including Workers in Wood, &c., . . .	17	—	4	—	—	21
Cash and Car Builders, Engineers, Workers in Metal, Draftsmen, &c., . . .	4	—	1	—	—	5
Architects, Surveyors, Civil Engineers, &c., . . .	—	—	19	—	—	19
Electrical Engineers, Scientific Instrument Makers, &c., . . .	—	—	—	—	—	—
Printing Trades—Compositors, Lithographers, &c., . . .	—	—	1	—	—	1
Textile Industries—Designers, Weavers, &c., . . .	—	—	—	—	—	—
Painters, Decorators, &c., . . .	—	—	1	—	—	1
Printers, Bookbinders, &c., . . .	1	—	—	—	—	1
Trades Involving Applied Art—Jewelry, Furniture Makers, &c., . . .	—	—	3	—	—	3
Chemists, Analysts, Draftsmen, &c., . . .	—	—	—	—	—	—
Salesmen, Shopkeepers, Warehousemen, &c., . . .	11	—	47	25	—	83
Clerks in Commercial Offices, . . .	3	—	17	8	—	28
Clerks in Banks, Civil Service, Law, Ac- countants, and Accountants' Offices, Teachers, Assistant Teachers, Pupil Teachers, Students (University, Law, Medical), . . .	3	—	9	3	—	15
Occupations not included in the above Classes, . . .	13	—	29	19	—	61
Have just left School or College, . . .	—	—	—	—	—	—
Have still in attendance at School or College, No occupation stated, . . .	7	—	23	18	—	48
Total Number of Young Men, . . .	55	—	155	90	—	300
Young Women.						
Persons engaged in Farming Occupations, . . .	—	—	—	—	—	—
Domestic Servants, . . .	5	—	8	—	—	13
Printing Trades, . . .	—	—	—	—	—	—
Ironworkers, Milliners, &c., . . .	1	—	3	—	—	4
Textile Industries—Designers, Weavers, &c., . . .	—	—	—	—	—	—
Factory Workers not included in above, Workers in Lace, Crochet, Embroidery, Spooling, Driven-Thread Work, &c., . . .	—	—	171	—	—	171
Saleswomen, Shopkeepers, &c., . . .	9	—	15	7	—	31
Clerks, Cashiers, Civil Servants, &c., . . .	10	—	19	11	—	40
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical), . . .	—	—	151	—	—	151
Occupations not included in above Classes, Girls just left School or College, . . .	7	—	45	30	—	82
Girls still in attendance at School or College, No occupation stated, . . .	60	—	—	23	—	83
Total Number of Young Women, . . .	100	—	417	103	—	620
Total Number of Students, . . .	155	—	572	193	—	920

TABLE V.—continued.
COUNTY SCHEMES—ITINERANT INSTRUCTION.

LEINSTER.

OCCUPATIONS OF STUDENTS.	Carlow.	Dublin.	Kildare.	Kilkenny.	King's Co.	Longford.	Louth.	Meath.	Queen's Co.	Wexford.	Wicklow.	Totals for Leinster.
<i>Young Men.</i>												
Persons engaged in Farming Occupations, Building Trades, including Workers in Wood, &c.	27	17	40	39	222	25	28	14	20	23	22	749
Cowh and Calf Breeders, Engineers, Workers in Metal, Draughtsmen, &c.	—	—	1	—	2	—	—	2	—	—	—	10
Architects, Surveyors, Civil Engineers, &c.	—	—	—	—	—	1	—	1	—	—	—	3
Electrical Engineers, Scientific Instrument Makers, &c.	—	—	2	—	—	—	—	—	—	—	—	2
Printing Trades—Compositors, Lithographers, &c.	—	—	—	—	—	2	—	—	—	—	—	2
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—	—	—	—	—	—	—
Farmers, Deacons, &c.	—	—	—	—	—	—	—	—	—	—	—	—
Plumbers, Gasfitters, &c.	—	—	—	—	—	—	—	—	—	—	—	—
Trades Involving Applied Art—Jewellers, Furriers, &c.	—	—	—	—	—	—	—	—	—	—	—	—
Chemists, Analysts, Draughtsmen, &c.	—	—	—	—	—	—	—	—	—	—	—	—
Salesmen, Shopkeepers, Watchmakers, &c.	—	—	32	—	16	24	—	2	35	—	1	100
Clerks in Commercial Offices.	—	—	—	—	11	7	—	1	11	—	—	27
Clerks in Banks, Civil Service, Law, Accounting, and Administrative Offices.	—	—	32	—	—	—	—	—	—	—	—	32
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical).	49	—	5	—	43	4	4	5	6	—	2	118
Occupations not included in above Classes.	—	18	—	—	15	—	5	14	22	3	7	102
Boys just left School or College.	—	27	10	5	12	—	—	24	20	2	22	103
Boys still in attendance at School or College.	20	—	—	—	—	—	—	—	—	—	—	20
No occupation stated.	—	4	—	—	—	—	—	—	11	—	—	15
Total Number of Young Men.	128	63	102	55	265	177	54	93	123	76	105	1,581
<i>Young Women.</i>												
Persons engaged in Farming Occupations, Domestic Servants, &c.	154	36	—	107	227	—	5	10	44	117	24	652
Printing Trades.	120	17	21	25	7	—	13	23	10	2	11	272
Dressmakers, Milliners, &c.	32	5	1	3	12	—	1	13	1	—	2	70
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—	—	—	—	—	—	—
Factory Workers not included in above.	—	3	—	1	—	—	—	9	—	—	—	12
Workers in Lace, Crochet, Embroidery, Spraying, Sewing-Machine Work, &c.	—	—	—	—	—	—	—	—	—	—	—	—
Saleswomen, Shopkeepers, &c.	—	—	—	—	14	10	5	33	10	6	6	100
Cooks, Waitresses, Civil Servants, &c.	10	—	—	—	6	—	2	14	28	4	7	71
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical).	30	2	—	32	5	—	—	2	—	—	—	79
Occupations not included in above Classes.	8	3	42	3	9	—	16	9	3	10	4	137
Girls just left School or College.	—	—	—	—	—	—	—	—	—	—	—	—
Girls still in attendance at School or College.	38	—	6	17	14	—	11	33	19	18	14	155
No occupation stated.	—	104	—	—	—	10	7	100	63	—	2	316
Total Number of Young Women.	399	190	78	208	347	26	88	161	108	264	85	2,244
Total Number of Students.	527	267	219	321	612	203	129	435	301	340	190	5,825

[285]

TABLE V.—continued.
COUNTY SCHEMES—ITERMEDIATE INSTRUCTION.—continued.
MUNSTER.

OCCUPATIONS OF STUDENTS.	Class.	Cont.	Kerry.	Limerick.	Tipperary (N.R.)	Tipperary (S.R.)	Tipperary (Jail. Urban and Rural.)	Waterford.	Total for Munster.
Young Men.									
Persons engaged in Farming Occupations, Building Trades, including Workers in Wood, &c.	39	112	153	67	50	99	35	96	492
Carpenters and Car Builders.	—	—	—	—	—	—	—	—	—
Business, Workers in Metal, Draughts- men, &c.	—	—	—	—	—	—	—	1	1
Architects, Surveyors, Civil Engineers, &c.	—	—	—	—	—	—	—	—	—
Electrical Engineers, Scientific Instrument Makers, &c.	—	—	—	—	—	—	—	—	—
Printing Trades—Compositors, Lithographers, &c.	—	—	—	—	—	—	—	—	—
Textile Industries—Designers, Weavers, &c., Tailors, Dressmakers, &c.	—	—	—	—	—	—	—	2	2
Plumbers, Gasfitters, &c.	—	—	—	—	—	—	—	—	—
Trades involving Applied Art—Jewellers, Parasol-makers, &c.	—	—	—	—	—	—	—	—	—
Chemists, Analysts, Dispensers, &c.	—	1	—	—	—	—	—	—	1
Salmonmen, Shopkeepers, Workhousemen, &c.	5	—	4	10	—	—	—	—	19
Clerks in Commercial Offices.	—	9	1	—	—	—	1	—	11
Clerks in Banks, Civil Service, Law, As- surance and Accountants' Offices.	—	—	—	—	—	—	—	—	—
Teachers, Assistant Teachers, Pupils Teachers, Students (University, Law, Medical).	2	9	5	19	—	—	—	4	39
Occupations not included in above Classes.	2	10	15	13	—	—	1	37	78
Boys just left School or College.	21	4	—	10	—	—	—	—	35
Boys still in attendance at School or College.	21	106	108	89	9	—	—	72	405
No occupation stated.	2	—	3	14	—	—	—	12	31
Total Number of Young Men.	73	274	376	230	59	109	36	232	1,169
Young Women.									
Persons engaged in Farming Occupations, Domestic Service, &c.	190	229	274	103	99	35	5	24	1,370
Printing Trades.	50	52	36	12	—	31	1	36	191
Dressmakers, Milliners, &c.	—	—	—	—	—	—	—	—	—
Textile Industries—Designers, Weavers, &c., Factory Workers not included in above.	5	12	16	8	—	5	—	10	56
Workers in Lace, Crochet, Embroidery, Knitting, Sewing-Machine Work, &c.	—	—	—	—	—	—	—	—	—
Salmonmen, Shopkeepers, &c.	45	146	55	21	—	12	4	8	201
Clerks, Cashiers, Civil Servants, &c.	4	—	—	—	—	2	1	—	7
Teachers, Assistant Teachers, Pupils Teachers, Students (University, Medical).	20	30	32	13	4	20	1	6	123
Occupations not included in above Classes.	12	20	45	24	42	1	11	109	222
Girls just left School or College.	—	—	—	—	—	—	—	—	—
Girls still in attendance at School or College.	58	49	67	94	—	68	31	2	262
No occupation stated.	22	123	177	47	—	144	4	25	535
Total Number of Young Women.	354	501	555	430	151	319	50	251	1,749
Total Number of Students.	405	1,078	1,161	669	197	320	86	483	4,417

TABLE V.—continued.
COUNTY SCHEMES—ITINERANT INSTRUCTION—continued.

ULSTER.

Occupations or Sections.	Ardara.	Ardara.	Cavan.	Down.	Down.	Fermanagh.	Londonderry.	Monaghan.	Tyrone.	Total for Ulster.
<i>Young Men.</i>										
Persons engaged in Farming Occupations, including Trades, including Workers in Wood, &c.	6	71	157	15	114	54	56	140	91	601
Cow and Calf Breeders, &c.	—	—	—	—	—	—	—	—	—	—
Builders, Workers in Metal, Distillers, &c.	—	5	1	—	8	1	—	—	—	15
Architects, Surveyors, Civil Engineers, &c.	—	—	—	—	—	—	—	—	—	—
Electrician, Engineers, Scientific Instrument Makers, &c.	—	—	—	—	—	—	—	—	—	—
Printing Trades—Compositors, Lithographers, &c.	—	—	—	—	—	—	—	—	—	—
Textile Industries—Designers, Weavers, &c.	—	1	—	—	1	—	—	—	—	2
Patent, Decorative, &c.	—	—	—	—	—	—	1	—	—	1
Plumbers, Gasfitters, &c.	—	—	—	—	—	—	—	—	—	—
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	—	—	—	—	1	—	—	—	—	1
Chemists, Analysts, Distillers, &c.	—	—	—	—	—	—	—	—	—	—
Salmon, Shopkeepers, Watchmakers, &c.	—	—	5	10	2	—	1	13	4	35
Clerks in Commercial Offices.	—	—	—	—	1	—	—	—	—	1
Clerks in Banks, Civil Service, Law, Agriculture, and Accountants' Offices.	—	—	—	—	—	—	1	—	—	1
Teachers, Assistant Teachers, Pupil Teachers.	1	3	3	3	3	3	1	1	1	27
Students (University, Law, Medical).	—	—	—	—	—	—	—	—	—	—
Occupations not included in above Classes.	—	3	12	—	10	13	1	11	—	50
Men not in school or College.	—	—	—	—	—	—	—	—	—	—
Men still in attendance at School or College.	5	59	39	4	55	59	25	55	59	375
No occupation stated.	—	19	14	12	—	2	2	6	12	75
Total Number of Young Men,	15	155	215	85	237	134	74	232	189	1,387
<i>Young Women.</i>										
Persons engaged in Farming Occupations, Domestic Service, &c.	123	41	75	32	209	4	30	—	58	572
Printing Trades.	—	—	—	—	—	—	—	—	—	—
Dressmakers, Milliners, &c.	—	—	—	—	—	—	—	—	—	—
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—	—	—	—	—
Factory Workers not included in above.	—	—	—	—	—	—	—	—	—	—
Workers in Lace, Crochet, Embroidery, &c.	—	—	—	—	—	—	—	—	—	—
Salmon, Shopkeepers, &c.	—	—	—	—	—	—	—	—	—	—
Clerks, Cashiers, Civil Servants, &c.	—	—	—	—	—	—	—	—	—	—
Teachers, Assistant Teachers, Pupil Teachers.	34	15	—	25	31	6	10	—	5	161
Students (University, Medical).	—	—	—	—	—	—	—	—	—	—
Occupations not included in above Classes.	—	—	—	—	—	—	—	—	—	—
Girls not in school or College.	—	—	—	—	—	—	—	—	—	—
Girls still in attendance at School or College.	54	309	19	10	1	2	30	2	6	375
No occupation stated.	—	—	—	—	—	—	—	—	—	—
Total Number of Young Women,	435	459	115	100	304	76	250	11	45	2,392
Total Number of Students,	655	574	330	607	641	215	354	346	359	3,799

[287]

TABLE V.—continued,
COUNTY SCHEMES—ITERANT INSTRUCTION—continued,
CONNAUGHT.

OCCUPATIONS OF BRUCCERS.	Galway.	Louth.	Mayo.	Downman.	Sligo.	Totals for Connaught.
<i>Young Men.</i>						
Persons engaged in Farming Occupations,	73	20	164	131	97	441
Building Trades, including Workers in Wood,	31	—	5	5	5	51
Coach and Car Builders,	—	—	1	—	1	2
Engineers, Workers in Metal, Draughts- men, &c.	—	—	—	—	—	—
Architects, Surveyors, Civil Engineers, &c.	—	—	—	—	—	—
Electrical Engineers, Scientific Instrument Makers, &c.	—	—	—	—	—	—
Printing Trades—Compositors, Lithographers, &c.	—	—	—	—	—	—
Textile Industries—Designers, Weavers, &c., Painters, Decorators, &c.,	—	—	—	—	—	—
Knitters, Sewers, &c.,	—	—	—	—	—	—
Trades Involving Applied Art—Jewellers, Furniture Makers, &c.	—	—	—	—	—	—
Chemists, Analysts, Draughts, &c.	—	—	—	—	—	—
Salmon, Shellfish, Warehousemen, &c.	12	—	34	1	3	40
Clerks in Commercial Offices,	1	—	1	—	—	2
Glaziers, Bankers, Civil Service, Law, As- surance, and Accountants' Offices,	—	—	—	—	—	—
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Law, Medical),	9	—	4	5	2	20
Persons not included in above Classes,	4	—	29	—	26	59
Boys just left School or College,	1	28	—	—	4	33
Boys still in attendance at School or College, No occupation stated,	47	5	24	22	—	98
	227	38	191	155	129	740
Total Number of Young Men,	120	51	205	151	124	751
<i>Young Women.</i>						
Persons engaged in Farming Occupations,	114	20	51	32	122	339
Domestic Servants,	6	11	5	6	10	38
Printing Trades,	—	—	—	—	—	—
Draughts, Milliners, &c.,	—	—	12	—	4	16
Textile Industries—Designers, Weavers, &c., Factory Workers not included in above, Workers in Lace, Crochet, Embroidery, Sewing, Power Thread Work, &c.	3	—	—	—	—	3
Salmon, Shellfish, Warehousemen, &c.,	—	—	25	—	3	28
Clerks, Bankers, Civil Service, &c.,	12	—	5	4	12	33
Glaziers, Bankers, Civil Service, &c.,	9	—	2	1	1	13
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical),	43	5	20	9	4	71
Persons not included in above Classes,	1	—	—	—	—	1
Girls just left School or College,	46	62	125	28	—	261
Girls still in attendance at School or College, No occupation stated,	70	25	78	116	3	392
	227	29	226	161	122	745
Total Number of Young Women,	754	192	349	261	191	1,547
Total Number of Students,	914	243	546	272	325	2,200

TABLE V.—continued.

SUMMARY.

OCCUPATIONS OF STUDENTS.	URBAN SCHOOLS.				
	Laborer.	Minister.	Writer.	Cornwright.	Total.
<i>Young Men.</i>					
Persons engaged in Farming Occupations, Building Trades, Including Workers in Wood, &c.	50	22	53	3	128
Coach and Car Builders, Engineers, Workers in Metal, Draughtsmen, &c.	150	154	239	27	570
Architects, Surveyors, Civil Engineers, &c.	23	23	7	1	54
Electrical Engineers, Schooling Instrument Makers, &c.	245	281	335	16	1,277
Printing Trades—Compositors, Lithographers, &c.	72	37	58	3	169
Textile Industries—Designers, Weavers, &c.	79	39	94	—	202
Painters, Decorators, &c.	197	40	162	8	407
Plumbers, Gasfitters, &c.	15	22	253	—	290
Trades Employing Applied Art—Jewellers, Furniture Makers, &c.	57	55	56	6	164
Chemists, Analysts, Druggists, &c.	46	34	25	3	108
Salesmen, Shopkeepers, Warehousemen, &c.	49	25	47	19	131
Clerks in Commercial Offices, Law, Assurance, and Accountants' Offices	54	40	125	2	221
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Law, Medical), &c.	115	117	427	51	710
Occupations not included in above Classes, Boys just left School or College, Boys still in attendance at School or College, No occupation stated,	474	317	852	31	1,674
	511	54	954	3	1,519
	59	142	223	26	450
	16	27	54	22	119
	568	153	141	17	879
	69	78	27	11	215
	129	40	127	9	305
	190	110	220	—	520
Totals (Young Men).	1,913	1,910	4,394	256	12,543
<i>Young Women.</i>					
Persons engaged in Farming Occupations, Domestic Servants, &c.	2	5	68	—	75
Printing Trades, Dressmakers, Milliners, &c.	202	83	272	24	581
Textile Industries—Designers, Weavers, &c.	9	—	54	—	63
Factory Workers not included in above, Workers in Lace, Crochet, Embroidery, &c.	168	122	417	34	741
Savannah, Chicago, &c.	26	—	436	—	462
Clerks, Cashiers, Civil Servants, &c.	27	15	429	7	478
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical), &c.	2	321	35	—	358
Occupations not included in above Classes, Girls just left School or College, Girls still in attendance at School or College, No occupation stated,	210	133	512	26	881
	116	125	522	26	789
	125	273	775	57	1,230
	35	6	62	2	105
	129	135	347	21	632
	169	163	167	6	505
	172	125	327	8	632
	169	459	1,297	40	2,965
Totals (Young Women).	2,666	2,135	5,998	348	11,147
Totals (Young Men and Young Women).	5,579	4,045	10,392	596	21,154

[239]

TABLE V.—continued.

SUMMARY.

COUNTRY SCHOOLS. Permanent centres of Instruction.					COUNTRY SCHOOLS. Miscellaneous Instruction.					OCCUPATIONS OF STUDENTS
Leicester.	Worcester.	Glouc.	Cambridge.	Totals.	Leicester.	Worcester.	Glouc.	Cambridge.	Totals.	
Young Men.										
87	140	148	32	435	77	48	681	441	2,253	Persons engaged in Farming Occupations,
82	150	54	39	367	86	55	40	41	225	Building Trades, including Workers in Wood,
6	15	7	5	33	18	9	1	2	15	&c.
6	45	39	—	135	9	—	13	—	10	Clock and Car Builders.
5	1	7	10	23	2	—	—	—	2	Engineers, Workers in Metal, Draughts-
5	—	4	—	9	—	—	—	—	2	men, &c.
35	8	9	1	54	2	—	—	—	2	Architects, Surveyors, Civil Engineers, &c.
5	—	24	—	29	1	—	18	—	10	Electrical Engineers, Scientific Instrument
19	18	1	1	39	—	—	—	—	5	Makers, &c.
28	5	2	3	38	—	—	1	—	5	Printing Trades—Composition, Lithographers,
4	—	—	—	18	—	—	—	—	10	&c.
10	—	—	—	29	—	—	—	—	10	Textile Industries—Designers, Weavers, &c.
28	—	—	—	38	—	—	—	—	5	Painters, Decorators, &c.
4	—	—	—	18	—	—	—	—	5	Furniture, Carriages, &c.
15	—	—	—	25	—	—	—	—	1	Trades involving Applied Art—Jewellers,
43	14	48	—	105	55	8	4	1	1	Furniture Makers, &c.
118	79	45	19	261	118	52	97	18	250	Chemists, Analysts, Druggists, &c.
2	13	5	—	17	—	—	—	—	51	Bankers, Shopkeepers, Watchmakers, &c.
74	371	47	84	536	109	78	65	48	83	Clerks in Commercial Offices.
75	10	18	—	103	39	37	11	23	83	Clerks in Banks, Civil Service, Law, As-
150	583	151	45	929	274	499	275	145	1,297	surance, and Accountants' Offices.
128	80	25	15	248	81	38	75	23	176	Teachers, Assistant Teachers, Pupil Teachers,
										Students (University, Law, Medical).
										Occupations not included in above Classes.
										Boys just left School or College.
										Boys still in attendance at School or College.
										No occupation stated.
1,168	1,644	554	364	4,030	1,581	1,165	1,337	749	4,835	Totals (Young Men).
Young Women.										
85	42	690	—	717	665	1,375	410	635	3,155	Persons engaged in Farming Occupations,
164	39	84	13	299	273	191	161	54	659	Domestic Services.
3	—	—	—	3	—	—	—	—	—	Printing Trades.
32	55	41	4	132	76	58	25	24	214	Dressmakers, Milliners, &c.
37	1	35	—	73	43	1	130	—	174	Textile Industries—Designers, Weavers, &c.
48	16	—	—	64	39	13	146	—	198	Factory Workers not included in above.
14	145	923	181	1,263	56	58	52	39	165	Workers in Lace, Crochet, Embroidery,
84	130	77	37	328	105	339	59	24	491	Sewing, Brown-Thread Work, &c.
47	18	68	12	145	36	17	16	11	80	Saleswomen, Bookkeepers, &c.
111	111	199	31	352	119	179	254	86	638	Clerks, Cashiers, Civil Servants, &c.
13	2	1	—	16	2	3	5	3	13	Teachers, Assistant Teachers, Pupil Teachers.
913	79	195	157	1,344	187	392	392	993	858	Students (University, Medical).
48	55	31	7	141	15	25	82	—	128	Occupations not included in above Classes.
176	337	328	104	945	219	337	323	303	1,092	Girls just left School or College.
254	108	379	53	794	284	238	426	417	1,075	Girls still in attendance at School or College.
										No occupation stated.
3,321	1,604	3,845	620	9,410	3,264	3,249	3,362	1,545	9,720	Totals (Young Women).
3,587	2,548	4,227	954	11,318	3,229	4,417	3,709	2,586	11,551	Totals (Young Men and Young Women).

TABLE VI.—TECHNICAL SCHOOL EXAMINATIONS, 1913.

LIST OF EXAMINATION CENTRES SHOWING THE COURSES IN WHICH EXAMINATIONS WERE HELD AT EACH CENTRE.

6127	ARMAGH: Municipal Technical School. Courses: Commerce, Building Trades, Domestic Economy, Art.
6038	ARMAGH: Natural History and Philosophical Society's Art Room. Course: Art.
6795	ASBY: Technical School. Courses: Commerce, Building Trades, Domestic Economy.
6359	BALLETHERNA: Municipal Technical School. Courses: Commerce, Building Trades, Mechanical Engineering, Art.
6360	BALLETHERNA: Technical School. Courses: Commerce, Building Trades, Domestic Economy.
6897	BANGOR: Technical School. Courses: Commerce, Applied Chemistry, Domestic Economy, Art.
6093	BELFAST: Christian Brothers' Schools, 29 Crumlin Road. Course: Art.
6495	BELFAST: Christian Brothers' Day Trades Preparatory School. Course: Art.
6227	BELFAST: Municipal Technical Institute. Courses: Commerce, Building Trades, Applied Chemistry, Electrical Engineering, Mechanical Engineering, Art.
6245	BEACROFT: Municipal Technical School. Course: Mechanical Engineering.
6457	BEAT: Technical School. Courses: Commerce, Domestic Economy.
6022	BUTTERFAVY: Technical School. Course: Commerce.
6486	CARRICKFERGUS: Technical School. Courses: Building Trades, Mechanical Engineering, Art.
6147	CARRIG: Presentation Convent. Course: Art.
6456	CLONMEL: Central Technical School. Courses: Commerce, Domestic Economy, Art.
6236	COLERAINE: Municipal Technical School. Courses: Commerce, Building Trades, Art.
6013	CORK: Christian Brothers' Schools, Our Lady's Mount. Course: Art.
6003	CORK: Covered Municipal Technical Institute. Courses: Commerce, Building Trades, Applied Chemistry, Mechanical Engineering, Domestic Economy, Art.
7055	DOWNPATRICK: Technical School. Courses: Commerce, Domestic Economy.
6416	DROGHEDA: Municipal Technical School. Courses: Commerce, Building Trades, Applied Chemistry, Art.
6143	DUBLIN: Christian Brothers' Training College, Marino. Course: Art.
6010	DUBLIN: City of, Technical Schools. Courses: Commerce, Building Trades, Applied Chemistry, Mechanical Engineering, Domestic Economy, Art.
6019	DUBLIN: Metropolitan School of Art. Course: Art.
6415	DUNDALK: Municipal Technical School. Courses: Commerce, Mechanical Engineering, Domestic Economy, Art.
6531	DUNWAGON: Technical School. Course: Commerce.
6761	FERRYON: Technical School. Courses: Commerce, Art.
6045	GALWAY: City of, Technical Institute. Courses: Building Trades.
6678	HOLYWOOD: Technical School. Course: Art.
6697	KILKENNY: City Technical School. Courses: Domestic Economy, Art.
6262	KILMAGOGH: St. Louis Convent. Course: Art.
6163	KINGSOWN: Municipal Technical School. Course: Domestic Economy.
6232	LARGE: Technical School. Courses: Mechanical Engineering, Domestic Economy, Art.
6676	LIMAVAST: Technical School. Courses: Commerce, Domestic Economy, Art.
6180	LISBURN: Christian Brothers' Schools. Course: Art.
6039	LISBURN: Municipal Technical Institute. Courses: Commerce, Building Trades, Applied Chemistry, Mechanical Engineering, Domestic Economy, Art.
6037	LONDONDERRY: Municipal Technical School. Courses: Commerce, Building Trades, Applied Chemistry, Mechanical Engineering, Art.
6433	LURGAN: Convent of Our Lady of Mercy. Courses: Commerce, Domestic Economy, Art.
6669	MACOMR: Technical School. Course: Commerce.
6963	MAGHERAFEE: Technical School. Courses: Commerce, Domestic Economy, Art.

[241]

- 6917 **MARTINBOROUGH** : Technical School. *Courses* : Commerce, Domestic Economy.
- 6766 **MIDDLETON** : Technical School. *Courses* : Commerce.
- 6224 **MORRISMAN** : St. Louis' Convent. *Courses* : Art.
- 6442 **NAAS** : Technical School. *Courses* : Commerce, Building Trades, Art.
- 6344 **NEWRY** : Municipal Technical School. *Courses* : Commerce, Building Trades, Mechanical Engineering, Domestic Economy, Art.
- 6733 **NEWTONCRANKY** : St. Mary's Convent. *Courses* : Art.
- 6311 **OMAGH** : Loreto Convent. *Courses* : Art.
- 6374 **PORTADOWN** : Municipal Technical School. *Courses* : Commerce, Mechanical Engineering, Art.
- 7046 **PORTSTEWART** : Technical School. *Courses* : Domestic Economy, Art.
- 4253 **QUINNSTOWN** : Convent of Mercy. *Courses* : Art.
- 6604 **QUINNSTOWN** : Technical School. *Courses* : Art.
- 6408 **RATHFRICK** : School of Commerce. *Courses* : Commerce.
- 6765 **SLIGO** : Municipal Technical School. *Courses* : Commerce, Building Trades, Art.
- 6146 **THURLES** : Presentation Convent. *Courses* : Art.
- 6096 **TIPPERARY** : Technical School. *Courses* : Commerce.
- 6571 **TRALE** : Central Technical School. *Courses* : Commerce, Building Trades, Mechanical Engineering, Domestic Economy.
- 6107 **TULLOW** : St. Patrick's Seminary. *Courses* : Art.
- 6477 **WATERFORD** : Central Technical Institute. *Courses* : Commerce, Building Trades, Applied Chemistry, Mechanical Engineering, Domestic Economy, Art.
- 6118 **WATERFORD** : Christian Brothers' Schools, Mount St. John. *Courses* : Art.
- 6347 **WEXFORD** : Municipal Technical School. *Courses* : Commerce, Mechanical Engineering, Art.

TABLE VII.

TECHNICAL SCHOOL EXAMINATIONS, 1913.

Summaries of Results.

Subject of Examination.	No. of Examination Centres	No. of Candidates	1st Class Successes	2nd Class Successes	Failures	No. of Exercises Cancelled*	Percentage of Passes (Candidates Excluded from Successes)
COURSES IN COMMERCE.							
<i>First Year.</i>							
Commercial Correspondence (including Office Routine) & Commercial Arithmetic	31	588	73	282	234	—	60·3
Book-keeping	34	464	114	210	140	—	60·8
Shorthand	14	149	32	29	88	—	49·9
<i>Second Year—Course A.</i>							
Book-keeping	17	197	11	43	26	27	67·5
Commercial Arithmetic and Business Methods	17	108	4	50	31	23	63·5
<i>Second Year—Course B.</i>							
Business Methods (including Shorthand and Typewriting)	3	8	1	3	2	3	60·7
French	3	9	1	3	—	5	100·0
Irish	1	1	—	—	1	—	0·0
COURSES IN BUILDING TRADES.							
<i>First Year.</i>							
Building Construction	18	122	34	55	33	—	73·0
Practical Mathematics and Practical Geometry	18	109	42	37	30	—	72·5
<i>Second Year.</i>							
Building Construction	12	43	9	20	6	8	82·0
Geometry and Mechanics	12	38	9	20	7	2	80·6
COURSES IN APPLIED CHEMISTRY.							
<i>First Year.</i>							
Elementary Physics	7	49	3	26	20	—	59·2
Elementary Chemistry	8	57	12	21	23	—	59·6
<i>Second Year.</i>							
Inorganic Chemistry	4	26	8	10	3	5	80·7
Chemical Analysis	4	26	8	8	5	5	76·2

* NOTE.—In three cases the Candidates had not completed the examination of the First Year of the Course.

[243]

TECHNICAL SCHOOL EXAMINATIONS, 1913.—(continued)

Summaries of Results.—(continued)

Subject of Examination.	No. of Examination Centres	No. of Candidates	1st Class Successes	2nd Class Successes	Failures	No. of Exercises Cancelled*	Percentage of Candidates Obtaining 2 Class or better (ignoring cancelled)
COURSES IN ELECTRICAL ENGINEERING.							
<i>First Year.</i>							
Practical Mathematics and Mechanics	1	31	7	13	12	—	61.3
Electrical Engineering ..	1	34	—	20	14	—	58.8
<i>Second Year.</i>							
Practical Mathematics and Technical Drawing ..	1	6	3	2	—	1	100.0
Electrical Engineering ..	1	6	—	4	1	1	80.0
COURSES IN MECHANICAL ENGINEERING.							
<i>First Year.</i>							
Machine Drawing ..	15	245	32	99	123	—	49.8
Practical Mathematics and Practical Geometry ..	15	241	58	81	102	—	57.7
<i>Second Year.</i>							
Machine Construction ..	8	85	18	33	9	25	85.0
Practical Mathematics and Mechanics	8	88	26	25	9	29	84.7
COURSE IN DOMESTIC ECONOMY.							
<i>First Year.</i>							
Cookery	22	159	27	89	34	—	77.3
Housewifery & Needlework ..	22	145	21	95	27	—	81.1
<i>Second Year.</i>							
Cookery & Laundrywork ..	8	28	3	18	3	4	87.5
Needlework	7	28	3	16	5	4	79.2
COURSES IN ART.							
<i>First Year.</i>							
Object & Memory Drawing ..	44	489	144	190	135	—	71.2
Mechanical Drawing and Design	42	428	28	184	216	—	49.5
<i>Second Year.</i>							
Object & Memory Drawing ..	21	158	29	53	11	63	88.2
Design	18	110	23	29	17	41	75.4
Drawing from Casts ..	14	99	13	31	20	38	68.3
Drawing from Natural Forms	7	45	6	12	8	19	69.2
Total for 1st Year Examinations		3,290	628	1,421	1,231	—	63.5
Total for 2nd Year Examinations		1,918	173	380	164	301	77.1
Gross Total		4,208	801	1,801	1,395	301	85.1

*NOTE.—In these cases the Candidates had not completed the examination of the First Year of the Course.

TABLE VII.—TECHNICAL SCHOOL EXAMINATIONS, 1902.

SUMMARY BY SUBJECT OF EXAMINATIONS HELD AT EACH COLLEGE.

Number	Name	Year Class Examinations					Senior Year Examinations				
		Students Entered	Students Present	Students Present	Students Present	Students Present	Students Entered	Students Present	Students Present	Students Present	Students Present
0001	Amesbury Technical School	20	1	1	1	1	1	1	1	1	1
0002	Amesbury Technical School and Philosophical Society Art Room	1	1	1	1	1	1	1	1	1	1
0003	Amherst Technical School	1	1	1	1	1	1	1	1	1	1
0004	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0005	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0006	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0007	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0008	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0009	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0010	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0011	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0012	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0013	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0014	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0015	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0016	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0017	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0018	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0019	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0020	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0021	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0022	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0023	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0024	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0025	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0026	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0027	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0028	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0029	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0030	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0031	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0032	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0033	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0034	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0035	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0036	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0037	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0038	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0039	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0040	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0041	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0042	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0043	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0044	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0045	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0046	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0047	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0048	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0049	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0050	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0051	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0052	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0053	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0054	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0055	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0056	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0057	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0058	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0059	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0060	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0061	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0062	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0063	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0064	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0065	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0066	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0067	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0068	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0069	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0070	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0071	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0072	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0073	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0074	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0075	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0076	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0077	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0078	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0079	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0080	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0081	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0082	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0083	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0084	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0085	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0086	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0087	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0088	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0089	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0090	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0091	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0092	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0093	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0094	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0095	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0096	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0097	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0098	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0099	Andover Technical School	1	1	1	1	1	1	1	1	1	1
0100	Andover Technical School	1	1	1	1	1	1	1	1	1	1

* None.—As four more the Candidates had not completed the Curriculum of the First Year of the Course.

1443

TABLE VII.—FEDERAL AGENCY REORGANIZATIONS, 1961.—*continued*

Summary of Results on Transitions from an Early Career

Number	Name	Four Year Examination					Seven Year Examination					Total
		English	Mathematics	Science	History	Physical Education	English	Mathematics	Science	History	Physical Education	
1001	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1002	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1003	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1004	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1005	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1006	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1007	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1008	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1009	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1010	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1011	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1012	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1013	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1014	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1015	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1016	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1017	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1018	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1019	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1020	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1021	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1022	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1023	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1024	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1025	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1026	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1027	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1028	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1029	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1030	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1031	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1032	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1033	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1034	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1035	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1036	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1037	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1038	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1039	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1040	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1041	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1042	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1043	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1044	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1045	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1046	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1047	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1048	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1049	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1050	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1051	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1052	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1053	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1054	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1055	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1056	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1057	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1058	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1059	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1060	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1061	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1062	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1063	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1064	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1065	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1066	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1067	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1068	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1069	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1070	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1071	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1072	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1073	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1074	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1075	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1076	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1077	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1078	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1079	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1080	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1081	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1082	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1083	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1084	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1085	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1086	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1087	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1088	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1089	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1090	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1091	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1092	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1093	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1094	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1095	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1096	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1097	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1098	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1099	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1100	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1101	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1102	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1103	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1104	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1105	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1106	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1107	St. Joseph's School, Chicago	100	100	100	100	100	100	100	100	100	100	1000
1108	St. Joseph's School, Chicago	100	100	100	100	100						

¹¹ *Wages—Do Wages reflect the Conditions and not misrepresents the Wages of the First Day of the Census*

TABLE IX.
LOCAL EXAMINATIONS IN ART AND IN SCIENCE AND
TECHNOLOGY (IRELAND), 1913.

LIST OF EXAMINATION CENTRES, showing the subjects in which
examinations were held at each Centre.

NOTE.—Science Subjects are designated by the numbers given them in Circular 776 (1912) of the Board of Education. Examinations in Drawing and Industrial Design were held in accordance with the syllabuses set forth in Circulars 786 (1911) and 798 (1912) of the Board of Education. The Examination in Drawing includes tests in:—(a) Drawing from the Antique; (b) Drawing from life; (c) Drawing from Memory; (d) Anatomy; (e) Perspective; (f) Architectural Drawing. The Examination in Industrial Design includes tests in:—(a) History and Styles of Ornament; (b) Elementary Design; (c) Original Design; (d) Drawing or Modelling from Historic Ornament.

Centre Number	Name of Centre.	Subjects to which Examinations were held.	
		Science.	Art.
LEINSTER.			
6610	CO. DUBLIN: City of Dublin Technical Schools.	Subjects I., II., III., IV., V., VI., VII., IX., X., XII., XIII., and XIV.	—
MUNSTER.			
6604	CO. CORK: Quondara Technical School.	Subject IX.	—
6603	CO. CORK: Carrigrohane Municipal Technical Institute.	Subjects I., III., IX., X.	—
ULSTER.			
6671	CO. KERRY: Tralee Central Technical School.	Subjects I., III., VI.	—
6677	CO. WEXFORD: Wexford Central Technical Institute.	Subjects III., XIV.	—
ULSTER.			
6627	CO. BELFAST: Belfast Municipal Technical Institute.	Subjects I., II., III., IV., V., X., XI.	Design and Industrial Design.
6635	CO. LONDONDERRY: Coleraine Technical School.	Subjects I., III., VI., XIV.	—
CONNAUGHT.			
6605	CO. GALWAY: Galway City of Galway Technical Institute.	Subject X.	—

[247]

TABLE X.

LOCAL EXAMINATIONS IN ART AND IN SCIENCE
AND TECHNOLOGY (IRELAND), 1918.

Summaries of Results.

EXAMINATIONS IN SCIENCE AND TECHNOLOGY (IRELAND).

Subjects.	Lower Stage		Higher Stage		
	Number Examined.	Pass.	Number Examined.	Pass (with distinction)	Pass.
<i>Group A.—Pure and Applied Mathematics.</i>					
I. Practical Geometry and Graphics.	12	7	8	—	3
II. Pure Mathematics.	20	14	13	10	6
III. Practical Mathematics.	7	6	6	1	1
IV. Theoretical Mechanics (Solids).	5	2	—	—	—
V. Theoretical Mechanics (Fluids).	4	—	—	—	—
<i>Group B.—Engineering.</i>					
VI. Machine Construction and Drawing.	2	1	2	—	—
VII. Applied Mechanics (Materials and Structures).	7	3	—	—	—
VIII. Applied Mechanics (Machines and Hydraulics).	5	3	—	—	—
IX. Heat Engines.	8	6	1	—	—
X. Building Construction.	16	13	11	—	5
XI. Naval Architecture.	4	3	—	—	—
<i>Group C.—Physics.</i>					
XII. Heat.	5	3	—	—	—
XIII. Magnetism and Electricity.	4	4	1	—	1
<i>Group D.—Chemistry.</i>					
XIV. Inorganic Chemistry.	5	2	—	—	—
XV. Organic Chemistry.	—	—	—	—	—
TOTALS.	104	67	42	3	15

EXAMINATIONS IN ART (IRELAND).

Examinations in Art were held at one centre, viz., the Municipal Technical Institute, Belfast. Four candidates took the Examination in Drawing and two that in Industrial Design. One candidate passed in Drawing and one in Industrial Design.

National Scholarship (Art) Awarded to an Irish Student.

BELFAST: MUNICIPAL TECHNICAL INSTITUTE.

Name of Candidate.	Subject taken.
Prater, Robert	Architecture.

Whitworth Scholarship Awarded to an Irish Student.

Name of Candidate.	Institute at which Candidate was a Student.
Wedgeood, George A.	Belfast: Municipal Technical Institute

[249]

TABLE XI.
NATIONAL COMPETITION, 1913.

Medals, Prizes and Awards gained by Irish Students.

BELFAST: MUNICIPAL TECHNICAL INSTITUTE.

Name.	Description of Work.	Award.
Quinn, Mary.	Design for painted cotton.	Commended.
Quinn, Sylvia M.	Modelled head from the east.	Commended.
Quinn, Marjorie B.	Design for damask serviette.	Commended.
Garrett, Lucy.	Design for embroidered bed-spread.	Commended.
Garrett, Lucy.	Studies of birds and animals treated for design.	Commended.
Garrett, Vida.	Oil-painting of draped figure from life.	Bronze Medal.
Garrett, Vida.	Oil-painting of draped figures from life.	National Book Prize.
Johnston, Elizabeth M.	Design for an embroidered card-case.	Commended.
McCarthy, Ellen.	Design for embroidered linen table-centre.	National Book Prize.
McCarthy, Dorothy M.	Design for damask serviette and towel-end.	Commended.
McCarthy, Dorothy M.	Modelled design for a memory frame.	Commended.
McCarthy, Dorothy M.	Design for damask serviette.	Commended.
Miller, James.	Design for painted cotton.	Commended.
Miller, David J.	Design for damask serviette and towel-end.	Commended.
Miller, Maria.	Design for stained glass panel.	National Book Prize.
Miller, Maria.	Water-colour painting of head from life.	Commended.
McCarthy, Newton H.	Design for stained glass.	Silver Medal.
McCarthy, Ethel K.	Design for embroidered panel.	Commended.
Smith, Dorothy B.	Modelled head from life, in relief.	Silver Medal.
Turner, Mary.	Modelled head from the east.	Commended.
Walker, David B.	Shaded drawing of bird from the antique.	Commended.
Walker, Ethel M.	Modelled figure from the antique.	National Book Prize.

CORK: CRAWFORD MUNICIPAL TECHNICAL INSTITUTE
SCHOOL OF ART.

Name.	Description of Work.	Award.
Anglin, Beatie.	Design for lace pelarime.	Commended.
Conry, Mary.	Studies of historic styles of lace.	Commended.
Conry, Kathleen.	Shaded drawing of head from the antique.	Commended.
Conry, Mary.	Design for lace pattern.	Commended.
Conry, Joseph.	Modelled figure from the antique.	National Book Prize.
Conry, Joseph.	Modelled figure composition.	Commended.
O'Neill, Mary.	Design for lace border and robe.	Silver Medal.
O'Neill, Mary.	Design for crocheted pelarime.	Commended.
O'Neill, Mary.	Design for lace skirt-end.	Commended.
O'Neill, Mary.	Shaded drawing of hands and feet from antique.	Commended.
Turnbull, Katherine.	Design for lace and crocheted.	National Book Prize.

[331]

TABLE XII.
EXAMINATIONS IN SUBJECTS OF TECHNOLOGY
(IRELAND), 1913.

Summaries of Results.

Year.	Number of Candidates Examined.	Number of Candidates Passed.	Number of Prizes
1912	531	461	4
1913	515	498	10
1914	554	498	10
1915	587	598	10
1916	607	413	10

No. of School	Centre of Examination.	Number of Candidates Examined.	Number of Candidates Passed.	Number of Prizes.
4355	Ballymena: Municipal Technical School.	4	1	—
4450	Ballymerry: Technical School	5	—	1
4533	Banbridge: Technical School	21	15	—
4527	Belfast: Municipal Technical Institute	596	183	9
4444	Barrow-in-Warwick: Technical School	2	—	—
4261	Carraig-na-Saib: Christian Boys' Schools	2	—	—
4556	Carrigrohilly: Central Technical School	2	—	—
4526	Celbridge: Municipal Technical School	2	—	—
4701	Clontarf: Technical School	2	—	—
4003	Cork: Crawford Municipal Technical Institute	190	52	1
4671	Downfall: Technical School	1	—	—
4414	Downpatrick: Municipal Technical School	4	—	—
4010	Dublin: City of Dublin Technical Schools	229	113	5
4531	Dungannon: Technical School	6	4	—
4509	Dunbarrow: Technical School	1	1	—
4613	Enniskillen: Technical School	3	—	—
—	Ferns: Post Office	1	—	—
4005	Galway: City of Galway Technical Institute	9	5	—
4607	Kilkeary: City Technical School	7	4	—
4163	Kingscourt: Municipal Technical School	8	5	—
4232	Larne: Technical School	7	5	—
4039	Limerick: Municipal Technical Institute	19	11	—
4937	Londonderry: Municipal Technical School	18	10	—
4347	Lough: Municipal Technical School	5	—	—
—	Monaghan: Post Office	2	—	—
4442	Newry: Technical School	0	1	—
4544	Newry: Municipal Technical School	6	4	—
4643	Newtownards: Municipal Technical School	1	—	—
4797	Omagh: Technical School	5	—	—
4634	Quartermount: Technical School	8	—	—
4773	Sligo: Municipal Technical School	4	—	—
4755	Strabane: Technical School	1	—	—
4571	Tralee: Central Technical School	6	—	—
4477	Waterford: Central Technical Institute	25	—	—
4347	Wexford: Municipal Technical School	2	—	—
	Total	531	461	4

EXAMINATIONS IN SUBJECTS OF TECHNOLOGY (IRELAND), 1913—
continued.

Prizes and Medals gained by Irish Students.

BALLYMONEY : TECHNICAL SCHOOL.

Name.	Subject.	Grade.	Place taken at Examination.	Prize.
Robinson, Robert	Masonry	Final	Second (equal)	43 1s. (Gold medal) and Silver Medal.

BELFAST : MUNICIPAL TECHNICAL INSTITUTE.

Name.	Subject.	Grade.	Place taken at Examination.	Prize.
Boss, Hugh Cyril	Linen Weaving	II.	Second	41 18s. (Clothworkers and Bronze Medal.
Wilson, John	Flax Spinning	Final.	First.	43 (Clothworkers) and Silver Medal.

CORK : CRAWFORD MUNICIPAL TECHNICAL INSTITUTE.

Name.	Subject.	Grade.	Place taken at Examination.	Prize.
Neenan, William	Tailors' Cutting	Final.	Second	Silver Medal.

DUBLIN : CITY OF DUBLIN TECHNICAL SCHOOLS.

Name.	Subject.	Grade.	Place taken at Examination.	Prize.
Brown, Robert Walter	Plasterer's Work	Final.	Second (equal)	44 (Plasterers) and Silver Medal.
Keogh, Hugh	Plasterer's Work	Final.	First.	43 (Plasterers) and Silver Medal.

LIST of IRISH CANDIDATES AWARDED SCHOLARSHIPS AND EXHIBITIONS offered by the WORSHIPFUL COMPANY of DRAPERS on the results of the Examinations of the City and Guilds of London Institute in the several branches of TEXTILE MANUFACTURE.

One Scholarship of the Annual Value of £80, in addition to College Fees, tenable for two years.

Higgins, John M. (Linen Weaving)—Belfast: Municipal Technical Institute.

Five Exhibitions of the Annual Value of £10, tenable for two years.

Bell, John (Linen Weaving)—Belfast: Municipal Technical Institute.

Jordan, Philip (Flax Spinning)—Belfast: Municipal Technical Institute.

McNeight, Robert F. (Linen Weaving)—Banbridge: Municipal Technical School.

Robinson, Joseph N. (Flax Spinning)—Belfast: Municipal Technical Institute.

Shannon, F. J. W. (Linen Weaving)—Belfast Municipal Technical Institute.

EXTRACT from the ANNUAL REPORT of the *City and Guilds of London Institute* for the SESSION 1912-13.

"As compared with last year's results, the number of registered classes in Technology has decreased from 343 to 227, and the number of Students in attendance from 3,247 to 2,750. The numbers of candidates and of passes are 131 and 131 as compared with 215 and 198 last year, the percentage of success being thus equally higher. Of the prizes and medals offered by the Institute 6 have been awarded to students in Ireland. At the examinations in Manual Training, two candidates qualified for Teachers' Certificates in Woodwork, and 10 passed the First Year's examination. Of the Scholarships and Exhibitions in Textiles, offered by the Drapers' Company, one scholarship and 5 Exhibitions were awarded to Irish Students."

ROYAL COLLEGE OF SCIENCE FOR IRELAND

FORTY-FIFTH ANNUAL REPORT OF THE COUNCIL FOR THE SESSION, 1912-13.

TO THE SECRETARY, DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

SIR,—I have the honour to submit the Forty-Fifth Annual Report of the Council of the Royal College of Science for Ireland.

The Council wishes to record its sense of the loss sustained by Science in the death, on the 11th September, 1913, of Sir Walter Noel Hartley, F.R.S., who occupied the chair of Chemistry in the College from 1879 to 1911, and who held the office of Dean of Faculty from 1902 to 1911.

Since the last Report the Department have established a new Professorship, that of Forestry, and two new Lectureships, one in Mathematics and one in Inorganic Chemistry. Mr. A. Henry, M.A., Reader in Forestry in the University of Cambridge, was appointed to the Chair of Forestry; Mr. J. P. Johnston, Sc.D., was appointed to a Lectureship in Mathematics, and Mr. J. H. Pollock, D.Sc., to that in Inorganic Chemistry.

Considerable improvements have also been made in the position of the staff of Attendants in the College.

During the session 1912-13 there were four Royal Scholars fifteen Science Scholars, thirty-four Agricultural Scholars (including two in Horticulture, one in Forestry, and one in Creamery Management), fourteen Teachers-in-Training, one Local Exhibitioner, three Research Students, and four Post-Graduate Scholars. There were also thirty fee-paying Associate Students and thirty-four fee-paying Non-Associate Students.

The total number of students in the College during the session was one hundred and thirty-nine.

In addition, two hundred and ninety-eight students attended the special courses of instruction organised in the College by the Department during the summer of 1913, particulars of which will be found in the Report of the Registrar.

Sessional examinations, conducted conjointly by the Professors and Lecturers of the College and external Examiners appointed by the Department, were held in forty-two subjects.

The annual recommendation as to the award of diplomas, Royal Scholarships, and prizes was made to the Department by the Council on the 5th July, 1913.

[255]

Diplomas of Associateship were awarded as follows on the results of the seasonal examinations.

Faculty of Agriculture.—J. W. Brown, G. L. Henderson, and M. J. Mullally. D. McCaw (Forestry).

Faculty of Engineering.—A. M. McLaughlin, E. A. Murphy, J. J. Smith, R. A. Weir.

Teachers-in-Training.—Natural Science Section—A. E. F. Hutchinson, C. L. Levingston.
 " " Chemistry Section—B. O'Neill.

At the conclusion of the session, A. M. McLaughlin, A.B.C.S.C.I., was awarded an Industrial Bursary of the value of £100 per annum for two years by the Commissioners for the Exhibition of 1851, and is carrying on work under its conditions at the Great Southern and Western Railway Works at Inchicore, Dublin.

Research studentships were awarded during the session to J. C. Elliott, A.B.C.S.C.I., A. Fletcher, M.A., B.A.L., G. E. Scharff, B.A., particulars of which will be found in the reports of the Faculty of Chemistry. Post-Graduate scholarships for the session 1912-13 were allotted to M. Caffrey, T. R. Hewitt, H. A. Lafferty, and J. Reilly, B.A., all of whom are Associates of the College.

Though the principle of a four years' curriculum for the Diploma of Associate of the College was introduced in the Faculty of Agriculture as early as 1911, the Session 1912-13 was the first in which it was definitely adopted for the College as a whole. It is, however, possible for a well trained student to produce qualifications which will allow him to omit the first year, or the first two years of the curriculum, and to enter directly on the work of the second or third year accordingly, in which case he may gain his diploma as an Associate after passing the examinations of the final years of the College course. The importance of the change lies in the additional value given to the Associateship, owing to the opportunity offered for specialised technical study in the final year. At the same time, the conditions remain unchanged, under which non-associate students, so far as room allows, may select special lines of work and may receive assistance in research.

I have the honour to remain, Sir,

Your obedient servant,

(Signed) GRENVILLE A. J. COLE,

Dean of Faculty.

CHEMISTRY.

Professor :—GILBERT T. MORGAN, D.SC., F.I.C.

The number of students attending the course of Chemistry was 35 of the first year, 28 of the second year, and 3 of the third year. Two students attended a special course in Assay. In addition to associate students 10 occasional students attended the laboratories for special courses of Practical Chemistry.

In the general chemical laboratories there were 45 students in the charge of Dr. Pollok and Mr. Moss. The total number of students attending the various courses in Chemistry was 76.

To the students of the first year 40 lectures were delivered by Professor Morgan. To the students of the second year 10 lectures in Physical Chemistry were delivered by Dr. Pollok, who also gave 10 lectures in Metallurgical Chemistry, the latter were attended by second year students in Chemistry and Engineering and by Teachers-in-Training in Experimental Science. To the students of the third year 40 lectures in Chemical Technology and 12 lectures on recent developments in Inorganic Chemistry were delivered by Professor Morgan.

Research Work.

During the session 1912-13 the following researches were carried on under the direction and supervision of the Professor :—

- (1) Mr. J. C. Elliott, A.R.C.S.C.I., investigated organic derivatives of mercury, selenium and allied elements in collaboration with the New York State Institute for the study of malignant disease.
- (2) Mr. A. Fletcher, B.A., B.A.L., continued his investigations of the electric micro-faradec and applied this apparatus to the determination of radium in minerals.
- (3) Miss F. M. G. Micklethwait, A.R.C.S.C. (Lond.), F.I.C., investigated the constitution of cyclic diazo-compounds.
- (4) Mr. H. Webster Moss, A.R.C.S.C.I., A.I.C., was engaged on an experimental study of residual affinity and co-ordination.
- (5) Mr. J. Reilly, M.Sc., B.A., A.R.C.S.C.I., continued his researches on non-aromatic diazo-derivatives.
- (6) Mr. G. E. Scharff, B.A., examined the tars produced by the distillation of peat.
- (7) Technological investigations on the following subjects were initiated in the chemical research laboratories :—
 - (a) The utilisation of the waste products of oil refining.
 - (b) The utilisation of horn refuse and the production of horn substitutes for art industries.
 - (c) The fractionation of peat producer tar.

[237]

The following papers have been published :—

- By Gilbert T. Morgan and Frances M. G. Micklethwait :—
 "The constitution of the diazoimines. Part II.—The *H*-tolyl-*B*-naphthatriazoles." *Clarendon Trans. Chem. Soc.*, 1913, 103, 71.
- By Gilbert T. Morgan and Henry Webster Moss :—"Coordination Compounds of Vanadium. Part I.—Acetylacetonates." *Trans. Chem. Soc.*, 1913, 103, 78.
- By Gilbert T. Morgan and Joseph Reilly :—"Non-aromatic diazonium salts. Part I.—Antipyrinediazonium salts and their azo-derivatives." *Trans. Chem. Soc.*, 1913, 103, 803.
- By Gilbert T. Morgan and Joseph Allen Pickard :—"Influence of Substitution on the reactivity of *H*-phenylennamine." *Proc. Chem. Soc.*, 1913, 25, 229.
- By Gilbert T. Morgan and Frances M. G. Micklethwait :—
 "The constitution of the ortho-diazoimines. Part III.—The α - and β -acyl-3 : 4-biethylenediazoimines as structural isomerides." *Trans. Chem. Soc.*, 1913, 103, 1391.
- By Gilbert T. Morgan and Joseph Reilly :—"Non-aromatic diazonium salts. Part II.—Azo-derivatives from antipyrinediazonium salts and their absorption spectra." *Trans. Chem. Soc.*, 1913, 103, 1494.
- By Arnold L. Fletcher :—"A refined method of obtaining sublimates." *Sci. Proc. Royal Dublin Soc.*, 1913, 13, 460.
- By Arnold L. Fletcher :—"A method for the determination of radium in radioactive substances." *Phil. Mag.*, 1913, 26, 674.
- By Arnold L. Fletcher :—"The fractionation of alloys and minerals in the electric micro-furnace." *Trans. Chem. Soc.*, 1913, 103 (in the press).

CHEMICAL TECHNOLOGY.

On May 10th, 1913, Professor Morgan and eighteen students attending the chemical courses paid a visit to the Explosives Factory of Messrs. Kynoch & Co., Arklow, Co. Wicklow.

At the close of the College session a tour of chemical works and laboratories in the London District was arranged and conducted by Professor Morgan. Seven students of the second and third years and four research students participated in the tour.

Visits were paid to the following works and laboratories :—

1. Messrs. Pearce & Sons, Ltd., Sulphuric Acid Works, Bow, London, S.E.
2. Messrs. Bryant & May, Ltd., Bow, S.E.

3. The Royal Doulton Potteries, Lambeth, S.W.
4. Messrs. Price's Candle Works, Battersea, S.W.
5. The British Oxygen Company, Westminster.
6. Messrs. Otto Monsted Ltd., Margarine Works, Southall.
7. The Whitefriars Glassworks, Fleet Street, London.
8. The Gas Light & Coke Company's Products' Works, Beckton, S.E.
9. Messrs. Barclay Perkin & Co.'s Brewery, Southwark, S.E.
10. Messrs. Burroughs, Wellcome & Co., Works and Laboratories, Dartford, Kent.
11. The Central Government Laboratory, Clements Inn, London.

ORGANIC CHEMISTRY.

LECTURER :—A. O'FARRELLY, M.A.

Thirty-seven lectures were delivered on the Introductory course of Organic Chemistry, attended by twenty-eight students of the second year, viz., six Chemists, eleven Teachers-in-Training and eleven students of Agriculture.

Sixteen lectures on advanced Organic Chemistry were also delivered, attended by three students of the third year and by two associates of the College.

Instruction was given in the laboratory by the lecturer to twenty-eight students of the second year and to three students of the third year.

ELECTRO-TECHNOLOGY AND PHYSICS.

ELECTRO-TECHNOLOGY.

PROFESSOR :—W. BROWN, B.Sc., M.I.E.E.

There were 5 students in the second year under the three years' scheme, who received 48 lectures from the Professor and 42 laboratory lessons under the Professor and Mr. Allen.

There were 10 students in the third year, 5 under the three years' scheme and 5 under the four year's scheme, who received 66 lectures from the Professor, and 20 lectures on dynamo-Machine design from Mr. Allen, and 56 lessons in laboratory work and testing of Electrical Machines under the Professor and Mr. Allen.

During the session the third year students in the Faculty of Engineering were taken to visit the Electric Power Stations at Ringsend, Ballsbridge, and Rathmines.

The Professor read a paper on "The Equipment of the Electro-technological laboratories of the Royal College of Science, Dublin," before the Dublin Section of the Institute of Electrical Engineers; and Mr. Allen a paper on "Interpoles, their design and use," before the same society.

Mr. W. J. Lyons, during the session, perfected an invention for Receiving Apparatus for electric telegraphs and electric selective systems.

PHYSICS.

LECTURER :—FELIX E. HACKETT, M.A., PH.D.

The course of instruction in the first year under the new curriculum for the diploma of the College consisted of 38 lectures and 65 laboratory lessons. It was attended by 34 students, of whom 22 were Associate students and 12 were Non-associate students.

The general course in Electricity and Magnetism for all students in the second year consisted of 18 lectures and 21 laboratory lessons. It was attended by 25 students.

The special course of instruction for Chemists and Teachers-in-Training in their second year consisted of 35 lectures and 20 laboratory lessons. It was attended by 16 students.

The general work in the laboratory was in charge of Mr. W. J. Lyons, B.A., A.R.C.S.C.L., and Mr. W. D. Douglas, A.R.C.S.C.L., under the direction of the Lecturer.

MATHEMATICS.

PROFESSOR :—W. McFADDEN ORR, M.A., F.R.S.

In the Mathematical Department the following Lectures were given :—

	Number of Lectures.
By PROFESSOR ORR :—	
First Year—Mathematics (Upper Division), . . .	78
Second Year—Mathematics,	72
Mechanics,	57
Third Year—Thermodynamics,	40
Applied Mechanics,	53
By DR. JOHNSTON :—	
First Year—Mathematics (Lower Division), . . .	89
Mechanics,	63
Second and Third Years—Mechanism,	24

As usual additional lectures outside the ordinary curriculum were given to some advanced students by the Professor.

Dr. Johnston also conducted First and Second Years' Classes in Experimental Mechanics as detailed in the report under the heading "Engineering."

AGRICULTURE.

PROFESSOR :—JAMES WILSON, M.A., D.Sc.

During the Session 1912-13 there were 8 students of Agriculture and one of Forestry in the Agriculture class.

All passed their Sessional Examinations.

AGRICULTURAL BIOLOGY.

LECTURER :—W. HOUSTON, F.L.S.

A course of 42 lectures with accompanying laboratory work on Agricultural and Forest Botany was given to the Agricultural students of the third year. Nine students attended including one Forestry student.

A full-time term course on Micro-Biology, including Industrial Bacteriology, was given to two advanced students, one of whom was a teacher from the Midland Institute of Agriculture and Dairying (Derby) who specialised in Dairy Bacteriology.

During the second term a course of 31 lectures with accompanying laboratory work on Applied Bacteriology was given to six students. Three of these were students in the Chemical faculty who received instruction in methods of Bacteriological analysis and three were students in the Natural Science Division who devoted their studies to the household and sanitary aspects of the subject.

Mr. P. McGinnis acted as Assistant in the practical courses.

Owing to the extension of the College curriculum to four years and the transference of Agricultural Bacteriology to the fourth year no lectures were given in this subject during the present session.

AGRICULTURAL CHEMISTRY.

LECTURER :—GEORGE STEPHENSON.

Owing to changes in the order of the subjects in the curriculum of the Faculty of Agriculture, no course in Agricultural Chemistry was held in the Session 1912-13.

FORESTRY.

PROFESSOR :—A. HENRY, M.A., F.L.S.

During the third term, when instruction in Forestry was commenced by the newly appointed Professor, one student, who is taking the course for the diploma in Forestry, attended lectures on Silviculture and Forest Mensuration.

The Professor was nominated by the Department as a Delegate to the International Forestry Congress, which was held at Paris in June, 1913; and in connection with this visited several forests and nurseries in France and Lorraine.

Seedlings of forest trees, which were raised from seed produced by artificial crossing of different species, are now growing in the Royal Botanic Gardens at Glasnevin; and the Professor desires to thank Sir F. W. Moore for the assistance rendered by him in this and other experiments.

The following was published :—

"Trees of Great Britain and Ireland." H. J. Elwes and A. Henry. Vol. VII., pp. 1658-1984. Index, pp. XXIV. and 1935-2022. Edinburgh. Privately printed.

GEOLOGY AND MINERALOGY.

PROFESSOR :—GREENVILLE A. J. COLE, F.G.S.

The following courses of instruction were given :—

I. *Mineralogy and Petrography*.—Twenty-nine lectures by the Professor, with eighteen days' practical work, attended by three students of the Faculty of Chemistry.

II. *Geology*.—Forty-eight lectures by the Professor, with forty-one days' practical work, including seven field excursions, attended by twelve students of the Faculty of Agriculture in their Second Year, one Teacher-in-Training in the Second Year, and one occasional student.

The field-work included a visit to Belfast, and the Giant's Causeway. Nineteen of the lectures were common to this course and that of Mineralogy.

III. *Geology for Teachers-in-Training in their Third Year*. The same course as in the Faculty of Agriculture, with ten additional lectures of the course in Mineralogy and extended lessons in palaeontology and petrology, attended by three students.

IV. *Agricultural Geology*.—Seventeen lectures by the Professor, with twenty-seven days' practical work, including one excursion for soil-sampling in the field attended by nine students of the Faculty of Agriculture in their Third Year.

Mr. W. D. Haigh acted as Assistant in the practical courses.

Among the additions to the Geological Collections may be mentioned the large model of the country near Dublin, on the scale of six inches to one mile, which has been coloured geologically for the College in the Office of the Geological Survey.

The Professor of Geology attended, in July and August, the meeting of the International Geological Congress in Canada as one of the representatives of the British Government, and contributed an account of the metamorphic rocks of north-western Ireland.

Mr. O. H. Little, A.R.C.S.C.I., Assistant in the Geological Division, was appointed to the post of Geologist in the Geological Survey of Egypt, and was succeeded in the College by Mr. W. D.

Haigh, A.R.C.S.I., who had for three years acted as professional Assistant in the laboratory of the Geological Survey of Ireland.

The following publications were issued in 1913 :—

G. A. J. Cole.—" Outlines of Mineralogy for Geological Students." Longmans, Green & Co.

G. A. J. Cole.—" The Geology of the Mallow and Sligo Districts." *Proc. Geol. Assoc.*, 24/62.

BOTANY.

PROFESSOR :—T. JOHNSON, D.Sc., F.L.S.

The usual courses of instruction for students in the Faculties of Agriculture and of Natural Science were given. Thirteen students in the Faculty of Agriculture and one Science Teacher-in-Training (in the Second Year) attended a course of 32 lectures and 35 practical lessons. Three Science Teachers-in-Training attended a course of 32 practical laboratory lessons. One student attended (in his Third Year) a course of 99 practical lessons in the structure of Timber and diseases of trees (Vegetable Pathology). One student (non-associated) attended a course of 41 practical lessons.

Mr. J. Adams acted as Assistant in the practical courses.

Papers published :—

T. Johnson.—" On Bothrodendron (Cyclostigma) Kiltorkense, Haughton." *Sci. Proc. R.D.S.*, vol. XIII. (N.S.), 1913.

J. Adams.—" On the germination of the seeds of some Dicotyledons." *Sci. Proc. R.D.S.*, 13, 1913

ZOOLOGY.

PROFESSOR :—GEORGE H. CARPENTER, B.Sc.

The Session 1912-13 was noteworthy for the full introduction of the new time-table to which reference was made in the report for 1911-12. The course in General Zoology held during the second term, was attended by twelve second year students of the Faculty of Agriculture, four Teachers-in-Training (one second and three third year) and two non-associate students. Twenty-eight days of laboratory instruction were given, with thirty-two lectures. In the third term zoological instruction in the field was given on four of the excursions arranged for general natural history work. The course in Agricultural Zoology was given during the first term; it comprised forty-two laboratory lessons, a set of ten lectures on Animal Physiology, eleven on Heredity and Evolution, and twenty on Systematic Economic Zoology. It was attended by nine third year Agricultural students, one of whom, specialising in Forestry, omitted the physiological section of the course and devoted extra time to entomology. Dr. Clarke acted as Assistant in the practical courses. Three third year Teachers-in-Training attended the

sections on Physiology and Heredity, and received ten lectures on Hygiene from Dr. Clarke. All the above mentioned students passed their Sessional examinations creditably, several with distinguished success.

The following papers have been published during the Session :—

- G. H. Carpenter :—" Clare Island Survey—Apterygota and Pycnogonida." *Proc. R. Irish Academy*, 31.
 — "Injurious Insects and other Animals observed in Ireland during the year 1912." *Econ. Proc. R.D.S.*, vol. II.
 — "A new West African Springtail." *Bulletin Entom. Research*, 3.
 — "A new Springtail from Galilee." *Journ. Asiatic Soc., Bengal*, 9.
 T. R. Hewitt :—"Notes on the Occurrence of the Woolly Aphis in the Core of Apples." *Journ. Econ. Biol.*, 3.
 — "A few species of Nematode from Co. Dublin." *Irish Naturalist*, 22.

ENGINEERING.

PROFESSOR :—H. H. JEFFCOTT, B.A.I., M.I.MECH.E.

LECTURER :—J. TAYLOR, M.A.

In the Department of Engineering the following courses of instruction were given during the Session :—

To the first year students a course in Experimental Mechanics of 54 experimental lessons by Dr. J. P. Johnston. Attended by 88 students.

To the first year students a course in Drawing and Practical Geometry of 21 lectures by Mr. Taylor, and 24 practical lessons. Attended by 85 students.

To the second year students in Engineering, Applied Chemistry, and Teachers, a course in Descriptive Geometry and Drawing of 16 lectures by Mr. Taylor and 28 practical lessons. Attended by 16 students.

To the second year students in Engineering, Applied Chemistry, and Teachers, a course in Experimental Mechanics of 18 experimental lessons by Dr. J. P. Johnston. Attended by 20 students.

To the second year Engineering students of both schemes, a course in Surveying and Levelling of 84 lectures by Mr. Taylor, 8 days field work, and 21 lessons in Mapping and Plotting. Attended by 18 students.

To the second year Engineering students a course of 104 lessons in the Engineering Workshop. Attended by 4 students.

To the third year Engineering students, and the second year Engineering students of the old scheme, a course in Materials, Machine Construction, and Steam Boiler and Engine Practice, consisting of 56 lectures by Professor Jeffcott, and 112 lessons

in the Drawing School, Laboratory and Workshops. Attended by 18 students.

To the third year Engineering students of the old scheme, a course in Structural Engineering and in the Design of Steam Engines, Turbines, Gas and Oil Engines and Hydraulic Machinery, consisting of 81 lectures by Mr. Taylor, and 131 lessons in the Engineering School. Attended by six students.

To the third year Agricultural students a course in Building Construction of 21 lectures by Professor Jeffcott, and 10 lessons in the Drawing School. Attended by 18 students.

To the third year Agricultural students a course in Agricultural Engineering of 15 lectures by Professor Jeffcott, and 15 lessons in the Workshops and Laboratories. Attended by 9 students.

To the third year Agricultural students a course in Surveying and Levelling of 24 lectures by Mr. Taylor, 6 days field work, and 7 lessons in Mapping and Plotting. Attended by nine students.

In addition to the associate students, there were 16 non-associate students attending various courses in Engineering.

The total number of students attending the various courses in the Engineering division was 92.

Mr. F. W. Warwick and Mr. M. E. Nolan assisted in the Laboratories and Drawing Office respectively.

At the end of the Session a party of eleven Engineering students was taken by Professor Jeffcott on a visit to several engineering works in and around Manchester. In all some seventeen of the principal works were visited, representing a very wide range of mechanical construction.

Visits were also made during the Session to the Great Southern and Western Railway Works at Inchicore, to the Midland Great Western Railway Works at Broadstone, and to the Pigeon House Power Station.

During the session a large part of the time of the staff was devoted to work connected with the new equipment of the Laboratories and Workshops.

The following work was carried out and reported on :—

The Testing of new types of Packing Cases for Butter and a comparison as regards strength with the Standard Packing Cases approved by the Department. This work was carried out for the Department by Mr. F. W. Warwick.

An examination of the present method of Ventilation of the College, the results being embodied in a Report to the Dean and Council by Professor Jeffcott and Mr. M. E. Nolan, which was forwarded to the Department.

[265]

**REPORT OF THE REGISTRAR OF THE ROYAL COLLEGE OF SCIENCE
FOR IRELAND FOR THE SESSION 1912-13,**

The number of students who attended the College during the Session 1912-13 was 139; of which 34 were Non-Associate Students, and 98 Associates—including one Local Exhibitioner undergoing a three years course. Of the remaining seven, three were Research students and four Post Graduate Scholars.

The corresponding numbers for the past five years were :—

Session.	Associates.	Non-Associate, etc.
1907-8,	73	33
1908-9,	35	32
1909-10,	62	26
1910-11,	101	38
1911-12,	101	40

The 98 Associate Students were divided as follows :—

First Year,	33
Second Year,	39
Third Year,	26

The following Third Year Students passed their final Sessional examination and were awarded the Diploma of Associate of the College :—

Faculty of Engineering.—Aloysius M. McLoughlin, James J. Smith, Edward A. Murphy, Richard A. Weir.

Faculty of Agriculture.—John W. Brown, George L. Handerson, Michael J. McElally, Daniel McCaw (Forestry)

Teachers-in-Training, Chemistry Section.—Bernard O'Neill.

“ “ *Natural Science Section*.—Albert E. F. Hutcheson, Colville L. Livingston.

The two Royal Scholarships offered for competition to Associate Students of the First Year who are not Science and Technological Scholars, Teachers-in-Training, Local or other Exhibitioners, were awarded to Frank G. Livingston and Claude Loveridge.

The Silver Medal offered for competition to all First Year Associate Students was won by Patrick O'Callaghan.

The following is a complete list of the Scholarships, Medal, and Prizes awarded on the results of the Sessional Examinations :—

Silver Medal,	Patrick O'Callaghan.
First Royal Scholarship,	Frank G. Livingston.
Second Royal Scholarship,	Claude Loveridge.

PRIZES.

FIRST YEAR.

<i>Mathematics</i> .—Upper Division.—J. O'Connell, 1st.	
D. Madden,	} 2nd divided.
P. O'Callaghan,	
<i>Mathematics</i> .—Lower Division.—C. Bourke, 1st.	
D. Candy, 2nd.	
<i>Mechanics</i> .—P. O'Callaghan,	} 1st and 2nd divided.
S. M. Cross,	
<i>Experimental Mechanics</i> .—G. K. Best,	} 1st and 2nd divided.
P. O'Callaghan,	

- Practical Geometry and Drawing*.—J. Greer,
F. G. Livingston, } 1st and 2nd divided
Experimental Physics.—P. O'Callaghan, 1st.
F. G. Livingston, 2nd.
Chemistry.—J. Ryan, 1st.
S. M. Cross, 2nd.

SECOND YEAR.

Faculty of Agriculture.

- Zoology*.—E. Sheehy, 1st.
J. Lyons, 2nd.
Geology.—W. Loeby, 1st.
E. Sheehy, 2nd.
Botany.—W. Loeby, 1st.
E. Sheehy, 2nd.
Organic Chemistry.—W. Loeby, 1st.
R. W. Dickson, 2nd.
Practical Chemistry.—J. Moore, 1st.
W. J. Patterson, 2nd.

*Faculties of Applied Chemistry and Engineering and Special Courses for
Science Teachers.*
Mathematics.—T. W. Hall, 1st.
W. F. Woodworth, }
R. J. Ennis, } 2nd. divided.
J. W. Porter, }
Mechanics.—C. Murphy, 1st.
Rev. Br. P. V. Ryan, 2nd.
Experimental Mechanics.—H. Thompson, 1st.
T. W. Hall, }
J. J. Murphy, } 2nd. divided.
Physics.—J. J. Murphy, 1st.
Rev. Br. M. C. Wall, 2nd.
Descriptive Geometry.—J. W. Porter, 1st.
C. Murphy, 2nd.
Organic Chemistry.—J. W. Porter, 1st.
T. W. Hall, 2nd.
Physical and Metallurgical Chemistry.—J. W. Porter, 1st.
H. G. Livingston, 2nd.
Mineral Analysis.—I. Hopper, 1st.
J. W. Porter, 2nd.
Machine Construction and Drawing.—W. H. Hasleton, 1st.
Surveying.—C. Murphy, 1st.
R. J. Ennis, 2nd.
Mechanics.—R. J. Ennis, 2nd.

THIRD YEAR.

Faculty of Agriculture.

- Agricultural Botany*.—E. J. Kennedy, 1st.
R. J. Fennin, 2nd.
Agricultural Geology.—R. J. Fennin, 1st.
D. O'Callaghan, 2nd.

[267]

- Agricultural Zoology*.—E. J. Kennedy, 1st.
H. Dale, 2nd.
- Agricultural Machinery*.—D. O'Callaghan, }
T. Healy, } 1st and 2nd. divided.
- Veterinary Hygiene*.—E. J. Kennedy, 1st.
R. J. Fennin, }
R. Lynch, } 2nd. divided.
- Building Construction*.—M. J. Sheehy, 1st.
D. O'Callaghan, 2nd.
- Surveying*.—R. J. Fennin, 1st.
D. O'Callaghan, 2nd.
- Vegetable Pathology*.—M. O'Beirne, 1st.
- Forestry*.—Daniel McCaw, 1st.
- Faculties of Applied Chemistry and Engineering and Special Courses for Science Teachers.*
- Thermodynamics*.—J. F. Nagle, 1st.
M. Keady, 2nd.
- Applied Mechanics*.—J. F. Nagle, 1st.
D. B. Harro, 2nd.
- Engineering*.—J. J. Smith, 1st.
A. M. McLoughlin, }
G. F. Harris, } 2nd. divided.
- Mechanics*.—J. J. Smith, 1st.
- Electro-Technology*.—J. J. Smith, 1st.
J. F. Nagle, }
G. F. Harris, } 2nd. divided.
- Geology*.—C. Livingston, 1st.
- Zoology*.—C. Livingston, 1st.
- Botany*.—C. Crockett, 1st.
- Bacteriology*.—C. Livingston, 1st.
- Analytical Chemistry*.—B. O'Neill, 1st.
- Advanced Organic Chemistry*.—John T. Grey, 1st.
- Advanced Mineralogy and Petrology*.—Bernard O'Neill, 2nd.

SEMI-ANNUAL COURSES OR INSTRUCTIONS for Teachers engaged in Secondary and Technical Schools, carrying out the Department's Schemes of Technical Instruction throughout the country, were held during the month of July in the following subjects:—

- Preliminary Course of Experimental Science, Second Year, attended by 40 students.
- Chemistry, Third Year, attended by 23 students.
- Chemistry, Fourth Year, attended by 34 students.
- Physics, Fourth Year, attended by 11 students.
- Botany, Third Year, attended by 7 students.
- Physical and Commercial Geography, Third Year, attended by 16 students.

Physical and Commercial Geography, Fourth Year, attended by 14 students.

Office Routine and Business Methods, First Year, attended by 11 students.

Office Routine and Business Methods, Second Year, attended by 8 students.

Manual Training (Woodwork), attended by 29 students.

At the end of the course there was a Theoretical and Practical examination in each subject.

During the month of August courses were conducted in :—

Hygiene and Sick Nursing, First Year, attended by 15 students.

Hygiene and Sick Nursing, Second Year, attended by 7 students.

Manual Training (Metal Work), attended by 8 students.

Fractional Mathematics, attended by 19 students; and

Handrailing, attended by 9 students.

There was also a course in Rural Economy and School Gardening during the month of August, attended by 23 students for the First Year, and 25 students for the Second Year of the course. This last course is intended mainly for Teachers working under the Commissioners of National Education and was conducted partly at the College and partly at the Albert Agricultural College, Glasnevin, and at the Kingstown Technical School Gardens.

P. A. E. DOWLING,

Registrar.

[269]

METROPOLITAN SCHOOL OF ART, DUBLIN.

REPORT OF THE HEADMASTER FOR THE SESSION 1912-13.

The Day Classes were attended by 186 students and the Evening Classes by 207 students, 36 students attending both day and evening classes.

The total number of students who attended the school during the session 1912-13 was 357, of whom 158 were male students and 199 female students.

The Personal Art Examinations formerly held by the Board of Education, London, have been discontinued, with the exception of a few special examinations which will be held in February next in order to enable those candidates to complete the required course of examinations necessary for the full certificate of the Art Class Teacher's standard, and also for the Art Master's Certificate under the old rules. In lieu of these examinations the Irish Department have now established a series of examinations for Art and Technical Schools in Ireland.

The total number of works submitted to the Board of Education for Teachers' Certificates, and for the National Competition was 162; of these 17 were for Teachers' Certificates, all of which were accepted by the Board's Examiners.

In the National Competition the School was awarded one Gold Medal, one Silver Medal, eight Bronze Medals, four National Book Prizes, and twenty-nine commendations.

The Gold Medal was awarded to Harry Clarke for designs for Stained Glass.

The Silver Medal was awarded to Austin Molloy for designs for Stained Glass.

The Bronze Medals were awarded to:—Margaret Criley, for an oil-painting of a figure from the life; Marjorie Drury, for a design for a lace collarette; Nora Molloy, for a design for a lace founce; Ethel M. Rhind, for a design for stained glass; Jennie FitzHarris, for a design for a lace collarette; Phyllis E. Wilson, for studies of plant form; Francis Wilson, for a modelled design for statuary, and to Harry Clarke for designs for book illustrations.

The National Book Prizes were awarded to:—Ethel G. Ball, for a modelled figure from life; Annie Kingston, for a design for a lace scarf; Mignon I. Evans, for studies of plant form, and to Francis D. Bown, for a modelled head from the life.

The Metropolitan School of Art, during the past year, has kept up the record of successes which has distinguished it in the past five years in the National Art Competition. A gold medal has for the third time been awarded to Harry Clarke for design for stained glass, a portion of his work being executed in the material. The examiners speak of this as "A remarkably original design, both as to subject and treatment, admirably drawn and well carried out in the glass. The colour is rich, sombre, and of great beauty, while the ingenious and beautiful arrangement of the leading makes a delightful pattern in itself." It will be seen that the other awards in the Competition were given to painting, modelling, metal-work and designs for lace, crochet, book illustrations, textiles, and for studies from the life and plant form from nature.

Under the Local Prize Scheme for the Session 1912-1913, prizes were awarded, as follows:—

JUNIOR SECTION.

For the three students who gained the highest marks in the Junior Section (Day Class)—Agnes Cullen, Cecile Philippe, Eileen O'Rourke.

For the three students who gained the highest marks in the Junior Section (Evening Class)—Henry Boughton, Patrick O'Donnell, Richard Watson.

SENIOR SECTION.

For the best set of studies of Plants chosen with a view to and executed with appreciation of their decorative possibilities—Phyllis Wilson, 1st; Mignon Evans, 2nd.

For the best set of historic studies in preparation for Design—Ethel Quigly.

For the best designs for given subjects—Phyllis Wilson.

For Designs for Lace—Marjorie Drury, 1st; Jennie FitzHarris, 2nd.

For Miscellaneous Designs adapted to the technical requirements of various materials, etc.—Harry Clarke, 1st; Alice Garland, Ivy Humphreys, 2nd.

For the best set of notes and sketches in connection with Advanced Design Lectures—Ethel Quigly.

For the best set of notes and sketches in connection with the Elementary Design Lectures—Grace K. Booth.

DRAWING AND PAINTING SECTION.

For the best Painting of a Figure subject from Irish history, Legend, Romance, etc., suitable for application as decoration for some Irish Public Building—Austin Molloy and Harry Clarke (equal).

For painting of the full length nude figure from life—James Slaton.

For painting of a Head from Life—Caroline Stein.

For Time studies from the full length figure—Myrtle McCready.

For the best Anatomical Studies and Notes—Ethel Holdbrook.

For the best Painting of an Antique Figure—Madeline D'Arcy.

For painting of a Head from an approved cast—Madeline D'Arcy.

For drawing on an Antique Figure—Alice Grimshaw.

Drawings of a Head, Hand and Foot from approved casts—Grace K. Booth.

Painting of a Group of Still Life, in Oil Colours—James Slaton.

MODELLING AND SCULPTURE SECTION.

Modelled Figure from Life (in the round)—Ethel Ball.

Modelled Head from Life (in the round)—Francis Bova.

Modelled Monthly Design—Francis Wiles.

CRAFT CLASSES.

Enamelling—Mary Lynch.

Metal-work—James Keating.

Enamelling and Metal-work, combined—Margaret O'Keefe.

Stained Glass—Harry Clarke.

Leather Work—Jennie FitzHarris.

The following Teacherships-in-Training, Art Scholarships, and Silversmiths' (Apprentice) Scholarships were awarded and renewed by the Department during the Session 1912-1913:—

Teacherships-in-Training.—Una Duncan, John Keating, Mary L. Lynch, renewed.

Art Scholarships.—Francis Wiles (modelling) awarded; James Slaton and Harry Clarke (Stained Glass) renewed.

Silversmiths' (Apprentice) Scholarships.—George McDonnell, Patrick O'Donnell (awarded), William Collins and Henry Dales (renewed).

Twenty-five Silversmiths' apprentices attended the School for instruction in drawing and design as applied to the needs of their art industry, and it may be mentioned that their attendance and general progress has been highly satisfactory. I may also mention here that six of these apprentice students and one journeyman silversmith have this session joined the craft classes in Metal-work, and Enamelling, and are all engaged in doing some good practical work. This is an encouraging sign which indicates that the young men engaged in this artistic trade are anxious to improve their knowledge of design and craftsmanship, and to take advantage of the facilities offered at the School for instruction and practice, when working in the actual materials of their craft. Our thanks are due to the Goldsmiths' Corporation of Ireland for their great help, and for the interest the members take in the art education of their apprentices who attend the School.

I have also to report that some apprentices engaged in the House Decorator's trade have applied for instruction in drawing, design, and in practical decorative painting, and I am pleased to say that we have recently made a beginning in this direction with a new class of six apprentice decorators, which I am sure is only the nucleus of a much larger one.

The Summer Courses of Art instruction to Teachers of the Secondary Schools, was held at the School during the month of July last, and was attended by seventy-nine Teachers. The classes were held under the supervision of the Headmaster, assisted by all the Teachers on the Staff.

A special feature of the Summer Course work was a new class in the craft of Metal-work taught by Mr. Reeves, when some interesting designs in the material were carried out, and the tuition and practice was highly appreciated by the members of the class.

The progress of the teachers attending the course was very satisfactory. The Branchardière Scholarship students, Miss Brennan and Miss Gollaghy, completed their course in drawing and designing for lace and crochet, and are now enabled to take up positions as teachers of lace and crochet-making.

The new evening classes in Architecture taught by Mr. G. Lynes, L.R.I.B.A., have been very successful. Two of the students having passed the Preliminary examination for the Associateship of the Royal Institute of British Architects, and one student has obtained an important position as an architectural draughtsman.

During the session the Headmaster gave some lectures on Mosaic, Methods of Painting, and Miniature Painting.

Landscape Classes were conducted during the month of July last under Mr. Lynes, when the students made some interesting sketches of landscapes and buildings in and around Dublin and the district.

At the Art Industries Exhibition of the Royal Dublin Society thirty-nine prizes were obtained by the students of the School for designs for Lace, Crochet, Embroidery, Enamelling, Metal-work, Stained Glass, Wood-carving, Illuminating and Leather-work.

In the Competition for the Taylor Art Scholarship prizes two students of the School have been successful, viz.—Mr. Patrick Tuckey, who was awarded three prizes of the total value of £45, and Mr. Michael Whelan, who was awarded a prize of £20.

The new class in Embroidery taught by Miss Figgott has been very popular and successful, the students now being enabled to carry out their own designs in the material.

I deeply regret the great loss to the School of Mrs. Barden, Assistant Art Mistress, who after a very severe illness died on the 11th of October last. She had done her duties faithfully at the School as an Art Mistress for the last 34 years.

Mr. Frederick Luke has retired from his service and duties as Second Master of the School in July last, a position which he filled with honour and distinction during the last 36 years. His colleagues on the Teaching Staff and his old students heartily wish him long life and good health in his well-earned retirement.

Mr. Michael J. Buckley, our late teacher of Mechanical Drawing, resigned his position, which he had held for 19 years, on his appointment in April last to the important position of City Engineer to the Dublin Corporation. The Staff and Students of the School congratulate Mr. Buckley on his new appointment.

The Annual Exhibition of Student's works was held during the Christmas vacation and was well attended by the pupils.

I have to thank Mr. Luke, and all the members of the Teaching Staff, and also Mr. Tilly, the Registrar, for their able and willing assistance given me at all times, which has largely contributed to the efficient and satisfactory position which the School continues to hold.

JAMES WARD,
Headmaster

SUMMARY OF INQUIRIES MADE BY THE DEPARTMENT IN REGARD TO COMPLAINTS RECEIVED RESPECTING DELAYS IN THE CONVEYANCE OF MERCHANDISE BY CARRYING COMPANIES, AND DAMAGE TO CONSIGNEES DURING TRANSIT.

Complaints made previous to the 1st July, 1912, in respect of which action was not completed when included in the Summary printed in the Appendix to the Twelfth Annual General Report.

MIDLAND RAILWAY CO. (NORTHERN COUNTIES COMMITTEE); GREAT NORTHERN RAILWAY CO. (IRELAND); GREAT SOUTHERN AND WESTERN RAILWAY CO., 15th November, 1911.—(1) That eleven days were occupied in the conveyance of 2 barrels of apples forwarded on the 31st October, from Monymore to Liscann, and that on arrival the heads of the barrels were found to be broken, about half the apples being missing, and the remainder in a badly damaged condition. (2) That a consignment of 2 barrels of apples, forwarded on the 24th November, from Monymore to Liscann, did not reach Liscann until the 29th November, and that one of the barrels was found to be broken, portion of the contents being missing.

(1) It appeared that the consignment was transferred by the Midland Railway Co. (Northern Counties Committee) to the Great Northern Railway Co. at Cookstown on the date of despatch, and was handed by the latter Company to the Great Southern and Western Railway Co. at North Wall, Dublin, on the 3rd November. The Great Southern and Western Co. stated that owing to very great pressure and congestion of traffic consequent on a strike of their employees, the consignment could not be sent forward from Dublin until the 9th November.

(2) It appeared that the consignment was handed by the Midland Railway Co. (Northern Counties Committee) to the Great Northern Co. at Cookstown, on the 25th November, was transferred by the latter Company to the Great Southern and Western Co. at North Wall on the 27th November (the 26th November was Sunday), and reached Liscann on the 28th November. The Great Southern and Western Co. stated that consignee at first declined to accept delivery, but ultimately accepted the consignment on the 6th December.

(1) and (2) A claim in respect of the apples missing from the consignments was met.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO.; CITY OF DUBLIN STRAM PACKER CO.; LONDON AND NORTH WESTERN RAILWAY CO., 22nd November, 1911.—(1) That 6 casks of butter forwarded on the 11th November, from Carrrowmore Station, Co. Sligo, to Ramebottom, Lancashire, were not delivered until the 17th November; (2) that 3 casks of butter, forwarded on the 13th November, from Carrrowmore Station to Hoole, Chester, had not been delivered up to the 22nd November; (3) that a consignment of eggs, forwarded on the 20th October, from Carrrowmore Station to Manchester, was not delivered to consignee.

(1) The Department did not succeed in obtaining particulars as to the terms of the consignment.

(2) It appeared that, during transit, inquiry had to be made as to the address of consignee, and that delay was occasioned thereby. It was understood that delivery was not effected until 24th November.

(3) A claim made in the matter was settled.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 5th December, 1911.—That of 8 new green churns sent from London to Newcastle West, only 7 had reached their destination after 12 days. The Department were informed that the remaining churn was subsequently delivered.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 25th January, 1912, 21st May, 1912.—(1) That claims amounting to £67 18s. 6d. made from July, 1911, to January, 1912, in respect of the non-delivery of, pilferage from, and damage to packages of butter forwarded from Charleville to Banff, Kettering, Oxford, Fitzpaine, Oham (two lots), Aberdrom, Gourack, Dunbar, Bedford, Bourne End (two lots), St. Andrew's (two lots), Ballater (two lots), and Coldstream, had not been paid. (2) That claims made in respect of the non-delivery of cream forwarded from Charleville on the 12th August and 14th September, 1911, to Hull and Evercreech, respectively, had not been met. (1) and (2) the Department were informed that the claims were settled.

GREAT NORTHERN RAILWAY (IRELAND) CO., 31st January, 1912.—That in one case—portion of a consignment of four cases of honey in sections—sent from Lishain to Dublin, 61 sections were found, on examination after delivery, to be in a badly damaged condition, and that a claim made in respect of the damage had not been met.

It appeared that the honey was conveyed at Owner's Risk, and that the Company was not prepared to meet the claim.

Complaints received during the period 1st July, 1912, to 30th June, 1913.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; GREAT WESTERN RAILWAY CO., 2nd July, 1912.—That 21 boxes of butter, portion of a consignment of 39 boxes, forwarded on the 7th June, from Devon Road, Co. Limerick, to Swansea, were not delivered to consignee.

It appeared that owing to a misunderstanding on the part of the Great Western Co. the boxes of butter were delivered to a firm in London.

The matter was satisfactorily settled, the Company paying a claim in respect of the consignment.

LAINO LINK, LTD., 2nd July, 1912.—That a box of butter, portion of a consignment forwarded on the 27th June from Dublin to Glasgow, was not delivered to consignee.

A claim in respect of the value of the missing box was met.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 8th July, 1912.—That owing to new transit arrangements by the Great Southern and Western Co. butter forwarded from Kilkenny on Friday evening (Friday being market day) did not reach Cork till the following Monday morning.

The Company stated that when it was required that consignments from the market should be delivered at Cork on Saturday, the 2.40 p.m. goods train from Kilkenny on Friday could be utilised for the conveyance of the butter. The Company added that a better goods train service could not be afforded.

GREAT NORTHERN RAILWAY CO. (IRELAND), 8th, 12th and 22nd July, 1912.—That certain alterations which had been made by the Company in the arrangements for the conveyance of goods from Omagh market occasioned inconvenience to the traders and were detrimental to their interests.

A satisfactory arrangement was, it appeared, arrived at in the matter.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 9th July, 1912.—That a consignment of four half cases of eggs forwarded on the 2nd July from Team to Kingston-on-Thames did not reach its destination until the 9th July, and that the consignee then refused to accept delivery.

It appeared that the consignment reached Dublin on the 3rd July, and London on the morning of the 5th July, that owing to an accident during carriage in London one of the half cases was smashed, that the remaining three cases were handed to the London and South Western

Railway Co. on the 6th July, and were tendered to the consignee on the morning of the 8th July (Monday). The London and South Western Co. stated that consignee at first refused to accept delivery, but ultimately did so on the 11th July.

A claim in respect of the half case which was smashed was met.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO. AND OTHER COMPANIES, 9th July and 27th and 28th October, 1912.—That eggs sent from Galway to Manchester in July and October, and to Liverpool in October reached their destination in a damaged condition.

The Department were informed by the Midland Great Western Co. that arrangements had been made to re-issue their instructions to their staff regarding the handling of egg traffic. Action was taken by the London and North Western Co. with a view to ensuring the safe transit of consignments forwarded by complainants.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 10th July, 1912.—That 10 boxes of butter forwarded from Kinturk to Dublin were, on delivery, noticed to be in a dirty condition, and that four of the boxes had to be re-coopered, the butter being disposed of at a reduced price.

The Great Southern and Western Co. informed the Department that the boxes were signed for as dirty when handed to them, and that no evidence of damage to any of the boxes had been noticed at the time of delivery.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO. AND OTHER COMPANIES, 13th and 16th July, 1912.—That two boxes of butter forwarded on the 2nd July, from Boyle to Burton-on-Trent did not reach their destination until the 10th July, that they were then in a damaged condition, and that consignee refused to accept delivery.

A claim made in respect of the consignment was settled with consignee who agreed to accept the butter.

GREAT NORTHERN RAILWAY CO. (IRELAND), 17th July, 1912.—That butter sent from Castleberg and arriving at Victoria Bridge in the morning was not forwarded from the station by the Great Northern Railway Co. until the evening, and that consignments consequently reached Belfast at Greenore late for shipment by the night boat.

Arrangements were made by the Company to convey consignments, forwarded via Greenore, by the 3.14 p.m. train from Victoria Bridge. This service would secure the arrival of consignments at Greenore in time for shipment by the night boat.

The question of consignments sent via Belfast was not proceeded with by complainants.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 10th July, 1912.—That notification of the arrival, at Clonsilla Station, of a spraying machine forwarded from Ballymore was not given to the consignee with the result that the machine lay at the station for ten days at a time when the spraying season was in full swing.

The Company expressed regret that consignee had not been advised of the arrival of the sprayer. It was, however, stated that the Company's officials did not consider it necessary to do so as representatives of the consignee were frequently at the station.

GREAT NORTHERN RAILWAY CO. (IRELAND) AND OTHER COMPANIES, 23rd July, 1912.—That a consignment of butter forwarded on the 16th July from Tassagh, Co. Armagh, to Motcombe, Wiltshire, had not been delivered up to the 23rd July.

The Department were informed that the consignment was received by the Great Northern Railway Co. at Armagh on the evening of the 18th July, was shipped from Belfast on the 17th, was handed to the Midland Railway Co. at Liverpool on the 18th July, was loaded for Birmingham on that date, reached Birmingham on the 20th July, Bristol

[275]

on the 22nd and Shillingstone on the 23rd, delivery being effected on the last-mentioned date.

It appeared that the delay was due to congestion of traffic. Under normal conditions, the time occupied in conveyance between the points would be about three days.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; GREAT WESTERN RAILWAY CO., AND LONDON AND SOUTH-WESTERN RAILWAY CO., 23rd July, 1912.—That 40 boxes of butter forwarded on the 12th July from Limerick to Motcombe, Wiltshire, were not delivered until the 17th July, and that it was then found that the consignment was in a badly damaged condition, and that there was an aggregate shortage of 95 lbs. of butter.

It appeared that the consignment was transferred to the Great Western Co. at Reading, on the 13th July, in apparently good condition, that it arrived at Fishguard on the evening of that date, was then loaded for Bristol whence it was forwarded in a through truck to Samley, where it arrived on the 16th July, delivery being taken the following morning when the butter boxes were signed for as "damaged—butter running out." The Great Western Co. stated that the damage to the consignment was attributable to the warm weather which prevailed at the time, and that a claim made in the matter was met.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 24th July, 30th July, 12th August and 20th August, 1912.—That consignments of eggs forwarded from Ruthkells to London were damaged in transit.

Inquiries were made by the Department in the matter. It appeared that some of the cases bore evidence of damage when being transferred by the Great Southern and Western Railway Co. That Company, however, stated that they were unable to find that there had been any rough handling during transit over their system.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 24th July, 1912.—That claims amounting to upwards of £40 in respect of consignments of produce, which were forwarded by complainant and which were lost in transit, had not been settled by the Carrying Companies concerned.

From inquiries made by the Department it appeared that some of the claims were settled. Subsequently the Department learned that complainant had instituted legal proceedings against the Great Southern and Western Company in regard to the non-payment of certain claims.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 25th and 26th July, and 17th August, 1912.—That the Company had discontinued facilities whereby goods traffic, forwarded via Cork, was conveyed by the 11.55 a.m. passenger train from Newmarket.

The Company stated that owing to an error goods traffic had been conveyed by the train, but that they could not revert to the practice.

COUNTY DONEGAL RAILWAYS JOINT COMMITTEE; MIDLAND RAILWAY CO. (NORTHERN COUNTIES COMMITTEE); AND OTHER COMPANIES, 27th July, 1912.—1. That certain consignments of eggs forwarded in May and July from Donegal to London were damaged in transit. 2. That 25 boxes of butter consigned on the 22nd July from Donegal via Belfast and the Great Western Railway Co.'s route to London, had not reached their destination up to the 25th July.

1. In one instance it appeared that a clear signature was given by consignee when delivery was effected. Claims in regard to the other consignments were met.

It appeared that the consignment arrived at Belfast on the 22nd July, was transferred at Crewe on the morning of the 24th July, and reached London on the evening of the 25th July, consignees being on the latter date, advised, by post, of the arrival of the consignment. Apparently the consignment was afforded the normal service by the route.

LARD LOAN LTD., 27th July, 1912.—That in a box of eggs forwarded from Londonderry to Partick, Glasgow, and delivered on the 16th May, and in another box delivered on the 26th June, 6 dozen and 8 dozen eggs respectively were, on arrival, found to be broken, and that claims made in respect of the loss sustained had not been met.

The claims were met.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; CLYDE SHIPPING Co., LANCASHIRE AND YORKSHIRE RAILWAY Co., 27th July, 1912.—That on the delivery of two consignments of butter, the one of 15 packages, each consisting of 24 1-lb. rolls, sent on the 6th July, and the other of 20 similar packages, sent on the 20th July, from Devon Road, Co. Limerick via Waterford to Bradford, it was found that 4 lbs. and 10 lbs. of butter respectively were missing.

It appeared that the 15 packages were delivered in apparently good condition, and were signed for without remark.

As regards the 20 packages the Lancashire and Yorkshire Co. stated that the consignment was received from the Clyde Shipping Co. at Liverpool in apparently good condition, but that it was found on arrival at Bradford that one box bore evidence of having been tampered with, and on unpacking 8 lbs. of butter were missing. A claim in respect of the loss was met.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co., 29th July, 1912.—(1) That on the delivery of a consignment of 8 boxes of butter forwarded on the 24th July from Killaloe to Liverpool, it was found that two of the boxes were badly damaged, the butter being dirty and coming from their boxes; (2) that two boxes of butter forwarded on the 25th July from Killaloe to Liverpool were badly damaged in transit and that in consequence consignees refused to accept delivery.

(1) and (2) The Great Southern and Western Co. stated that the consignments were transferred to the London and North Western Co. in apparently good condition. The latter Company stated that the butter appeared to have become soft in transit owing to the climatic conditions prevailing at the time, and that the matter had been disposed of to the satisfaction of the consignees.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 29th July, 1912.—

(1) That 6 boxes of butter forwarded on the morning of the 24th July from Killaloe to Cork were not delivered until the 26th July, the butter being then in bad condition; (2) that one pyramid of butter—portion of a consignment of two pyramids and one box—forwarded from Killaloe to Cork was found on arrival to be broken, and that three packages bore evidence of careless handling during transit.

(1) The Great Southern and Western Co. stated that the consignment was delivered on the morning of the 26th July, having met with some delay in transit. The Company added that they held a clear receipt for the butter. (2) The Company expressed regret for the condition of the packages on arrival, and stated that they had been unable to find that there had been rough handling during conveyance. The Company expressed the view that the boxes were not properly put together.

CO. DONEGAL RAILWAYS JOINT COMMITTEE; MIDLAND RAILWAY Co. (NORTHERN COUNTIES COMMITTEE); ISLE OF MAN STEAMSHIP Co., 2nd August, 1912.—That a consignment of butter forwarded about midday on Saturday, the 27th July, from Bridgetown, Co. Donegal, via Belfast and direct boat to Douglas, Isle of Man, was not shipped from Belfast on Monday, and did not reach Douglas until Wednesday.

It appeared that the butter was transferred to the Midland Railway Co. (Northern Counties Committee) at Londonderry, at 4.30 p.m. on Saturday, was sent forward from Londonderry by the 4.30 a.m. goods train on Monday, and reached Belfast late for shipment by that day's

boat. The Midland Railway Co. (Northern Counties Committee) informed the Department that a better service for consignments sent on Saturdays from Bridgetown to Douglas could not be given via Londonderry and Belfast, but that a more expeditious service was available via Strabane and Belfast.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 3rd August, 1912.—That about the beginning of the 1912 butter season the Great Southern and Western Co. discontinued a daily fast goods train service which had been utilized for the conveyance of butter to Cork from stations on the Company's branch lines, especially from places in Co. Kilkenny and Queen's County.

The Department communicated with the Company in the matter. The Company replied to the effect that no alterations had been made in the goods train service.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 6th August, 1912.—That on the examination after delivery of two boxes containing specimens of drawings and designs sent in good condition from Blackrock, Co. Cork, to Dublin, it was found that the glass in the frame of one of the drawings was broken.

A claim for 2s. 3d.—the cost of reglazing—was met.

LARD LOTS, LTD., 19th August, 1912.—That a claim for 10s. made in respect of breakages in a box of eggs forwarded from Londonderry to Partick, Glasgow, had not been met.

The claim was met.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co.; and CALDONIAN RAILWAY Co., 14th August, 1912.—That a consignment of eggs forwarded on the 12th July from Ballyragget, Co. Kilkenny, to Leith, was found on arrival to be badly damaged.

Arrangements were made to meet a claim in respect of the damage.

LONDON AND NORTH WESTERN RAILWAY Co., and GREAT SOUTHERN AND WESTERN RAILWAY Co., 24th August, 1912.—That 26 empty rabbit hampers, part of a consignment of 30 hampers, forwarded on the 21st June from Manchester to Crusheen, County Clare, had not been delivered.

From inquiries made by the Department it appeared that the 30 hampers were delivered on the 1st July.

GREAT NORTHERN RAILWAY Co. (Ireland); LONDON AND NORTH WESTERN RAILWAY Co., 26th August, 1912.—That on the delivery of two consignments of chickens forwarded in August from Ballybeg Station (Co. Meath) to London, it was found that 3 chickens and 2 chickens respectively were missing.

A claim in respect of the loss sustained was met.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; CITY OF COKE STREAM PACKET Co.; LANCASHIRE AND YORKSHIRE RAILWAY Co., 26th August and 30th August, 1912.—That on the delivery of a consignment of 10 boxes of butter forwarded on the 16th August from Devon Road, County Limerick, via Cork and Liverpool, to Bradford, it was found that eight pounds of butter were missing from one of the boxes.

A claim made in respect of the loss was met.

(1) and (2) **GREAT WESTERN RAILWAY Co.;** (3) **GREAT SOUTHERN AND WESTERN RAILWAY Co., 30th August and 9th September, 1912.**—(1) That wagons which had not been iced and which were not provided with suitable means of ventilation were used for the carriage of meat from Fishguard to London, and that, in warm weather, meat so conveyed was likely to become reduced in value. (2) That certain consignments of meat forwarded in July and August from Wexford to Smithfield Market, London, were delivered from 5.15 a.m. to 9 a.m. the best prices not being obtainable after

5 a.m. (3) That well-ventilated vans, fitted with hooks at such a height as would admit of short sides of beef being hung clear of the floor should be provided for the conveyance from Wexford to Rosslare, of meat forwarded to London.

(1) It appeared that the wagons in use were the ordinary refrigerator vans. Complainants stated that these vehicles were not suitable for the traffic when ice was not used. The Company stated that it was not the practice of Railway Companies to provide ice free but that, if traders so desired, it could be arranged to have vans iced at their expense. (2) The Company stated that a service from Fishguard at 6.30 a.m. on Wednesdays and Fridays, and at 1.30 p.m. on other days of the week had been arranged, consignments reaching Smithfield Market at Midnight on Sundays and about 2 a.m. on other days. (3) The Company stated that three wagons, suitable for the conveyance of the traffic, were available.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 31st August, 1912.—That two 8-hhd. cases of eggs forwarded on the 22nd August and 24th August respectively, from Railhead to London were damaged in transit.

The Great Southern and Western Co. informed the Department that instructions were given for a settlement of the claims made in respect of the damage.

GREAT NORTHERN RAILWAY Co. (Ireland), AND LONDON AND NORTH WESTERN RAILWAY Co., 2nd September, 1912.—That four crates of pork forwarded on the 28th August from Ballyhaise via Greenore to London were in very bad condition on delivery.

It appeared that the consignment was forwarded from Ballyhaise in an open truck and was at Greenore found to be wet and that on the arrival of the consignment at London three of the pigs had fallen owing to the breaking of a bottom in one of the crates. As regards the question of loading in an open wagon the Great Northern Co. stated that the crates were too large to fit in a covered wagon, that they were protected by canvas during conveyance to Greenore, but that no cover had been put over the wagon as consignee had informed the Company that they did not approve of the crates being so covered.

GREAT SOUTHERN AND WESTERN RAILWAY Co., and GREAT WESTERN RAILWAY Co., 3rd September, 1912.—That in two cases of eggs forwarded from Cahersiveen to Cashel, 150 eggs were, on delivery on the 29th August, found to be broken.

Inquiries were made by the Department in the matter. Information as to where or how the damage occurred was not obtained. It appeared that the eggs were consigned at Owner's Risk, and that the Companies were not prepared to meet a claim made in respect of the damage.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co.; GREAT SOUTHERN AND WESTERN RAILWAY Co., 7th September and 28th September, and 14th and 15th October, 1912.—That a sufficiently expeditious service had not been given to consignments of butter forwarded in August, September, and October to Cork from Abbeylisk, Arva Road, Balla, Ballinglasserreen, Ballina, Ballisodare, Balinglass, Boyle, Castlebar, Charleville, Foxford, Kesh, Killeen, Kilsnash, Maryborough, Mountcash, Swinford, Tharles, and Tubber.

Arrangements were, it appeared, made to secure an improved service for the traffic to Cork from the places mentioned.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 9th September, 1912.—That facilities had not been afforded for the conveyance from Milltown, Co. Galway, of a quantity of timber which had been purchased in the locality by complainants.

Arrangements were made by the Company to accept two or three wagons of the traffic daily at the station.

[279]

LARD LIME, LIMITED, 9th September, 1912.—That due care was not exercised in the handling at Londonderry Port of cases of eggs forwarded to Glasgow.

Complainant did not furnish particulars regarding any specific consignment, the handling of which was considered unsatisfactory. An Inspector of the Department who inquired into the matter reported that no complaint had been made to the Company. It was suggested to complainant that any instance of careless handling should be brought under the notice of the Company.

SLIGO, LEITRIM AND NORTHERN COUNTIES RAILWAY CO., 9th September, 1912.—That butter forwarded on the 29th July, 1911 (Saturday) from Sligo to England was conveyed via Greenore and was not shipped until Monday, while if the consignment had been conveyed via Dublin it could have been shipped on Sunday.

It appeared that the butter had been consigned by the Sligo, Leitrim and Northern Counties Railway Co.'s route, and that, at the time, the Company had no arrangements for the transfer of traffic at Dublin to the Sunday boat (London and North Western Railway Co.). Arrangements were made by the Company for such transfer.

The Department were informed that, if no route had been indicated the consignment would have been conveyed via Dublin by the Midland Great Western Co. and would have been forwarded from Dublin on Sunday.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 26th September, 1912.—That certain cases of eggs and bags of creamery butter, which were forwarded from Tipperary on Saturday, the 21st September, and which should have been handed to the Waterford Steamship Co. at Waterford in time for their Sunday boat were not delivered to consignees in Manchester until Wednesday afternoon.

The Company stated that owing to heavy traffic the consignment did not reach Waterford in time for shipment by the Sunday morning boat. The Company added that a claim made in regard to the consignment was declined "as there was no blame attaching to the Company in connection with the transit of the consignment."

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 3rd October, 1912.—That owing to cransage accommodation not being provided at Boyle station, crates of pork could not be loaded direct from the cart to the wagon with the result that it was not found practicable to place consignments in the crates until the latter were in the railway wagons, the additional handling necessitated being likely to lead to damage to consignments.

Arrangements were made for the erection of the necessary apparatus on the loading bank at the station for lifting crates of pork from the carts to the trucks.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 10th October, 1912.—That eighty boxes of butter forwarded from Killeshandra on the 10th October, were loaded by the Company in a wagon which had not been properly cleaned after previous use for the conveyance of cattle.

The Company stated that although the wagon was cleaned and lime-washed before being used for the carriage of the butter, all traces of cattle droppings had not been removed before the lime was put on. The Company added that suitable notice had been taken of the matter with a view to preventing a recurrence.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO.; DUBLIN AND SOUTH EASTERN RAILWAY CO., 16th October, 1912.—That on the examination, after delivery, of a case of eggs forwarded from Ballinacree to Bray it was found that 26 eggs were missing.

It appeared that the consignment was in apparently good condition when delivered and that a clear receipt was given by the consignee. The Dublin and South Eastern Company stated that they had taken up the ques-

sion of the handling of the traffic with the Midland Great Western Company and also with their own staff.

GREAT SOUTHERN AND WESTERN RAILWAY Co., and GREAT NORTHERN RAILWAY Co. (IRELAND), 18th October, 1912.—That a box of butter forwarded on the 2nd October from Cork to Dundalk was not delivered until the 7th October.

It appeared from inquiry that the delay was due to the box getting separated from the invoice during transit.

GREAT NORTHERN RAILWAY Co. (IRELAND), 18th October, 1912.—That consignments of butter and eggs forwarded from Castleberg, Co. Tyrone, to Liverpool, were not conveyed from Victoria Bridge station by the Great Northern Railway Co. in time for shipment on the day of dispatch.

From inquiries made by the Department in the matter it appeared that consignments could be forwarded from Victoria Bridge by the 11.32 a.m. train and that such consignments conveyed via Greenacres should be shipped the same night and should reach Liverpool early on the following morning.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 21st October, 1912.—That butter forwarded from Thurles to Manchester was delayed in transit.

Complainant was asked by the Department for particulars regarding the consignments referred to. The information was not received.

GREAT SOUTHERN AND WESTERN RAILWAY Co., and OTHER COMPANIES, 2nd November, 1912.—That nine 112-lb. firkins of butter forwarded on the 16th October from Kilmoney via Dublin and Heydnam to Gateshead-on-Tyne were not delivered until the 25th October, and that eight firkins forwarded on the 24th October had not been delivered up to the 31st October.

It appeared that the former consignment reached Gateshead on the 26th October unsorted, and that the delay in delivery was due to an oversight. Suitable notice was taken by the North Eastern Railway Co. of the occurrence.

The Department were informed that the other consignment was transferred at Dublin on the 25th October, was forwarded from Heydnam on the 26th October, and was delivered on the 31st October. It was stated that the consignment met with delay while being conveyed by the Midland Co. The question as to delay received the attention of the Company.

It appeared that the normal time occupied in the transit of consignments between the points was about four days.

(1) **GREAT SOUTHERN AND WESTERN RAILWAY Co., and GREAT WESTERN RAILWAY Co. ; (2) GREAT WESTERN RAILWAY Co., 6th November, 1912.**—

(1) That in a consignment consisting of fourteen sides of beef forwarded on the 18th August from Wexford to London, eleven sides were, on delivery found to be considerably damaged.

(2) That on the 9th September delivery of a consignment of dead meat sent from Wexford to London commenced at 7.15 a.m. but was not completed until about 9 o'clock.

(1) and (2) The Great Western Co. stated that, in regard to claims made in these cases, an offer which they considered reasonable had been made to complainants.

GREAT NORTHERN RAILWAY COMPANY (IRELAND), 7th November, 1912.—That of a consignment of twelve chickens forwarded from Ballybeg station, County Meath, to London, only eleven reached their destination.

The Department asked to be informed of the date of dispatch. Complainant, who was unable to give the desired information, subsequently stated that for some time there had been no loss in any consignments forwarded.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co., and OTHER COMPANIES, 9th November, 1912.—That consignments of butter, each

[281]

consisting of six boxes, forwarded on the 28th October and 4th November respectively, from Killeshandra, County Cavan, to Brierley Hill, Staffordshire, were not delivered up to the 2nd November and 9th November.

The Midland Great Western Company stated that the consignments were transferred at Dublin to the London and North Western Company on the dates of despatch. The London and North Western Co. stated that the delay was due to a temporary stoppage of the working of the canal between Albion and destination. The Company added that the circumstances were quite exceptional, and expressed the view that there would not be any cause for further complaint. It appeared that, at Albion, goods for Brierley Hill, which was only a passenger station, were transferred by the London & North Western Co. for conveyance by canal.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; CLYDE SHIPPING CO. LANCASTER AND YORKSHIRE RAILWAY CO., 13th November, 1912.—That in a consignment of two 8-hbd. cases of eggs forwarded in August from Kilmallock via Waterford and Liverpool to Blackpool, 156 of the eggs were broken in transit, and that a claim made in respect of the damage had not been met.

From inquiries made in the matter it appeared that the consignment was in good condition at Liverpool. The Lancashire and Yorkshire Co. stated that on arrival at Blackpool one case was observed to be leaking, and that on examination after delivery 63 eggs in one case and 87 in the other were found to be broken. The Company also stated that the eggs were conveyed at Owner's Risk, that there was no evidence that the consignment met with any rough usage when in their hands, and that they could not see their way to meet the claim.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 22nd November, 1912.—That 12 empty cream cans, consigned on the 18th November from Dublin to Limerick, Co. Kerry, had not been delivered up to the 22nd November.

It appeared that the cans were delivered on the 23rd November, and that the Company had communicated with complainant in regard to the transit.

LONDON AND NORTH WESTERN RAILWAY CO.; MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 23rd November, 1912.—(1) That returned empty peck crates forwarded from England to Boyle were frequently delayed in transit. (2) That in two lots delivered at Boyle on the 12th and 15th November respectively, five crates and three crates were found to be badly smashed.

(1) The London and North Western Company stated that delay had occurred in the conveyance of one or two crates owing to the absence of addresses, that the matter had been taken up with the merchants who returned the crates and that proper labels had since been put on each crate.

(2) The London and North Western Co. stated that they were unable to find that any damage to the crates was noticed by their officials at the North Wall, Dublin. It appeared that the crates were loaded through to the Midland Great Western Co. by the London and North Western Co., and were not again handled until they reached Boyle, when the damage was observed. The Midland Great Western Co. informed the Department that instructions had been given with a view to the prevention of any damage to crates during conveyance over their line.

GREAT NORTHERN RAILWAY CO. (IRELAND); LONDON AND NORTH WESTERN RAILWAY CO., 29th November, 1912.—That certain cases of eggs forwarded from Poynton to Manchester arrived in bad condition.

The Department communicated with the Companies in regard to the conveyance of the cases. It was not ascertained at what point the damage occurred.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO.; LONDON AND NORTH WESTERN RAILWAY CO.; LANCASTER AND YORKSHIRE RAILWAY

Co., and HULL AND BARNESLEY RAILWAY CO., 30th November, 1912.—That six casks of butter forwarded on the 16th November from Killeshandra to Hull were not delivered until the 25th November.

The Department were informed that the consignment was shipped from Dublin on the 16th November, reached Leeds on the 19th, Huddersfield on the 20th, was loaded from Huddersfield for transfer on the 21st, was dealt with at Wakefield on the 22nd, was transferred at Huddersfield Junction to the Hull and Barnsley Railway Co. on the 23rd—after the Company's morning train from that point for Hull had left—and reached Hull on the night of the 23rd, delivery being effected on the 25th November, (Monday). It was stated that the consignment had been invoiced to Leeds, and that delay had thereby been occasioned. It appeared that traffic for Hull should, in the ordinary course, reach its destination on the second day after despatch from Dublin.

GREAT SOUTHERN AND WESTERN RAILWAY CO., and LONDON AND NORTH WESTERN RAILWAY CO., 6th December, 1912.—That consignments of butter forwarded on the 23rd September from Abbeydorney, Co. Kerry, and Ardnagh, Co. Limerick, to London, were not delivered until after 4.30 p.m. on the 26th September.

Inquiries were made by the Department in the matter. It appeared that owing to pressure of traffic, delay occurred in the conveyance of the consignments from Limerick Junction, with the result that the butter was not handed to the London and North Western Co. at Dublin in time for shipment by their midday boat on the 24th September. The Department were informed that further delay to the consignments was occasioned at Holyhead through pressure and dislocation of traffic consequent on exceptionally heavy shipments of dead meat.

GREAT SOUTHERN AND WESTERN RAILWAY CO., and OTHER COMPANIES, 6th December, 1912.—(1) That a consignment of 31 boxes of butter forwarded on the 15th May from Rathkeale, County Limerick, to Bootle, was delayed in transit, and that a claim made in the matter had not been met. (2) That 17 boxes of butter forwarded on the 21st June from Rathkeale to Bootle did not arrive until the 26th June, and that a claim in respect of the loss, owing to the delay in conveyance, had not been met.

(1) The Department were informed that the boxes were forwarded "under mark," and that the invoice became separated from the consignment during transit, thus necessitating inquiries as to the destination of the butter which occasioned some delay. It appeared that the consignment was conveyed at Owner's Risk, and that the Carrying Companies concerned were not prepared to consider favourably the question of meeting the claim.

(2) The claim was settled.

GREAT SOUTHERN AND WESTERN RAILWAY CO. : LONDON AND NORTH WESTERN RAILWAY CO., 12th December, 1912.—That two cases of eggs forwarded respectively on the 29th November and 6th December, from Tipperary to Preston, were damaged during transit.

A claim made in regard to the former case was met. The Great Southern and Western Co. informed the Department that a claim in respect of damage to the other case had been declined as the eggs were conveyed at Owner's Risk.

GREAT SOUTHERN AND WESTERN RAILWAY CO., and OTHER COMPANIES, 20th December, 1912.—That six boxes of butter forwarded on the 6th December from Devon Road, Co. Limerick, to Gorsemon, Glamorgan-shire, had not been delivered up to the 20th December.

The Great Southern and Western Co. stated that delivery was effected on the 11th December, and added that suitable notice was being taken of the transit afforded.

GREAT NORTHERN RAILWAY CO. (IRELAND); LONDON AND NORTH WESTERN RAILWAY CO., 21st December, 1912.—That certain crates of pork forwarded from Ballyhaise, Co. Cavan, to London and Manchester, were delayed in transit.

It subsequently appeared that legal proceedings were instituted in the case by complainant.

GREAT NORTHERN RAILWAY CO. (IRELAND), 22nd December, 1912.—That adequate accommodation was not available at Virginia Road Station for the loading of pork traffic.

The Company stated that the complaint was largely due to the circumstance that the crane at the Station was inside the goods store and that arrangements had been made to move it to the loading bank.

MIDLAND GREAT WESTERN RAILWAY CO.; LONDON AND NORTH WESTERN RAILWAY CO., 3rd January, 1913.—That a consignment of pork forwarded about midday on Thursday, the 19th December, from Kingscourt, Co. Cavan, to London, was not delivered until the following Saturday evening, being then late for market.

It appeared that some delay occurred to the consignment while in the hands of the London and North Western Co., owing to pressure of Christmas traffic and to the large quantity of dead meat for the conveyance of which provision had to be made by the Company.

The Department were informed that consignments sent to London from Kingscourt station about midday on Thursday should, in the ordinary course, reach their destination early on Saturday.

DUBLIN AND SOUTH EASTERN RAILWAY CO.; LONDON AND NORTH WESTERN RAILWAY CO., 7th January, 1913.—That a more expeditious service was required for the conveyance of dead meat forwarded, by goods train service, from Wicklow via Dublin to London.

The Dublin and South Eastern Co. stated that consignments received the ordinary goods train service. The London and North Western Co. informed the Department that special attention was given to the traffic, that it was shipped without delay at Dublin, and that it was conveyed by express goods train from Holyhead to London.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 9th January, 1913.—That two firkins of butter forwarded from Tipperary to Huddersfield, were not delivered at their destination.

Complainant was asked for particulars regarding the consignment. The information was not supplied.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 14th January, 1913.—That two boxes of butter forwarded on the 11th January from Limerick to Fiddown did not reach the latter station until between 4 and 5 p.m. on the 13th January.

The Company stated that the delay was regretted and that arrangements had been made to secure a more expeditious transit for future lots.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; LONDON AND NORTH WESTERN RAILWAY CO., 18th January, 1913.—That a consignment of pork forwarded on the 15th January from Ashy to the London Market was not delivered until 8.30 a.m. on the 17th January.

It appeared that the consignment was shipped from Dublin by the mid-day boat on the 16th January, and was sent forward from Holyhead on that date reaching London at 5.15 a.m. on the morning of the 17th January. The Department were informed that suitable notice was taken of the delay in delivery.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 22nd January 1913.—That of a consignment of three cases of eggs forwarded on the 30th April, 1912, from Ballyhaise to Bolton, only two cases were delivered at their destination.

The Department were informed that only two cases were received by

the Company. Consignor was asked to forward to the Department the Company's receipts for the consignment. No reply was received.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND LONDON AND NORTH WESTERN RAILWAY CO., 23rd January, 1913.—That on the examination, after delivery, of three cases of eggs forwarded on the 28th December from Athlone to Bolton, it was found that eggs were missing from the consignment.

A claim made in the matter was met.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 27th January, 1913.—That eggs forwarded from Tubbercurry to a trader in Lancashire were damaged in transit.

Inquiries were made in the matter. Early in April complainant informed the Department that there had been a great improvement in the condition in which cases of eggs arrived.

GREAT NORTHERN RAILWAY CO. (IRELAND), 29th January, 1913.—That egg boxes with strain forwarded on the 17th January from Belfast to Dungannon were exposed to adverse conditions of weather at Dungannon Station.

The Company stated that the consignment was kept under cover at the station until delivery was taken.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; GREAT WESTERN RAILWAY CO., 11th February, 1913.—That fifteen carcasses of pork forwarded on the 4th February from Ashy to the London market were not delivered until 9.20 a.m. on the 7th February.

It appeared that the Pork had been consigned via Fishguard and that a more expeditious service could have been obtained if the consignment had been forwarded via Dublin and Holyhead.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO.; GREAT SOUTHERN AND WESTERN RAILWAY CO., 13th February, 1913.—That of 35 wagons of pigs sent on the 12th November from Hollyhairs to Limerick one wagon was delayed in conveyance—not arriving until the evening of the 13th November.

It appeared that the wagons were transferred to the Great Southern and Western Co. at Clonsilla, and that 34 of them, the maximum number allowable, were forwarded from that station by special train which reached Limerick on the morning of the 13th November. The Department learned that the remaining wagon was afforded the ordinary service by goods train from Clonsilla as the Company were not prepared to make available two special trains for all the 35 wagons. The Department were also informed that the pigs did not reach Clonsilla in time to allow of one of the wagons being conveyed by the 3.10 p.m. passenger train from that station on the 12th November, so as to connect at Tullin with the next Limerick goods train from that station.

CITY OF CORK STRAMPACKET CO., 17th February, 1913.—That of a consignment of 120 barrels of cured mackerel forwarded on 3rd February from Courtmacsherry, Co. Cork, via Cork, to Liverpool, and advised by the Company as having been shipped from Cork on the 4th February, only 47 barrels reached consignees on the 6th February, the delivery of the full consignment not being completed until the 11th February; and that at Liverpool it was noticed that a number of hoops had been stripped from the barrels apparently through careless handling during conveyance.

The Company stated that owing to great pressure of live stock traffic it had not been found possible to ship more than 50 of the barrels from Cork on the 4th February and that the remaining 69 barrels were shipped on the 6th February. The Company expressed regret for the trouble and inconvenience caused through the omission to correct the advice as to shipment. As regards the damage the Company stated that the barrels were not subjected to any ill-usage while in their possession.

GREAT NORTHERN RAILWAY CO. (IRELAND) AND OTHER COMPANIES. 24th February, 1913.—That on the delivery of consignments of eggs forwarded from Irmistown and Pettigo to Glasgow it was found that eggs were missing from some of the cases.

It appeared that claims in respect of the loss were met in most instances.

CORK AND MEWKERRY LIGHT RAILWAY CO.; GREAT SOUTHERN AND WESTERN RAILWAY CO., 27th February, 1913.—That a 56-lb. box of butter forwarded, per passenger train service, on the 12th February from Coachford, Co. Cork to Dublin, was not delivered until the morning of the 15th February.

The Department were informed that the delay was due to an omission on the part of the carrier employed by the Great Southern and Western Company's carriers at Cork, and that suitable notice had been taken in the matter.

GREAT NORTHERN RAILWAY CO. (IRELAND), 19th March, 1913.—That on delivery, it was found that two chickens were missing from a consignment forwarded on the 21st February from Ballybeg, Co. Moath, to London.

A claim made in the matter was met.

GREAT NORTHERN RAILWAY CO. (IRELAND), 26th March, 1913.—That some of the cases in consignments of eggs forwarded to Dublin from Aughacloy (6 cases) and Dungannon (10 cases) on the 19th and 20th March respectively, were not tendered to consignees until the 24th March.

Complainant was asked for the names and addresses of the consignees, but the information was not received as regards the cases forwarded from Aughacloy.

The Company stated that the 10 cases sent from Dungannon were handed to them on the evening of the 20th March, that an effort had been made to have the cases forwarded by the morning goods train from Portadown on the 21st March, but that the Dungannon train ran late with the result that the connection was missed at Portadown. It appeared that the cases did not reach Dublin until the morning of the 22nd March (Saturday).

GREAT SOUTHERN AND WESTERN RAILWAY CO., 27th March, 1913.—That the Company omitted to provide three wagons for the conveyance of ten premium bulls by the 8.20 a.m. train from Kingsbridge, Dublin, to Cork and Mallow, although a request had been duly made for the wagons.

A claim for £3 15s. the expenditure (loading and feeding the animals) incurred owing to the omission on the part of the Company was met.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; LONDON AND NORTH WESTERN RAILWAY CO., NORTH EASTERN RAILWAY CO., 29th March, 1913.—That a consignment of butter forwarded on the 19th March from Kihmallock to Sunderland was not delivered until the evening of the 27th March.

It appeared that the consignment was transferred to the London and North Western Co. at Dublin on the 26th March, and to the North Eastern Co. at Leeds on the 26th March. The London and North Western Co. stated that the delay to the butter while in their hands was due to the Easter holidays (the 21st March was Good Friday).

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO.; LONDON AND NORTH WESTERN RAILWAY CO., 2nd April, 1913.—That five cases of eggs forwarded on Saturday, the 29th March from Ballymore to Manchester had not been delivered at their destination up to the following Thursday morning.

The Department were informed that the consignment was forwarded "undermark" and was handed by the Midland Great Western Railway Co. to the London and North Western Co. on the 30th March, but that no

information as to its destination was then supplied to the latter Company. It appeared that on that date, however, the London and North Western Co. forwarded the cases to Holyhead, where delay occurred pending the receipt of disposal instructions. The Department learned that, immediately on receipt of the instructions, the consignment was forwarded from Holyhead.

G. & J. BURNS, LTD., 2nd April, 1913.—That a consignment of fresh pork, from Ennisceorthy, which was conveyed by the steamer leaving North Wall, Dublin, on Saturday, the 29th March, and due to arrive in Glasgow on Sunday morning was not delivered to consignees at Glasgow until the following Tuesday morning.

It appeared that dock labourers at Glasgow Harbour ceased work at 1 p.m. on Saturdays, that the Company's steamer which left Dublin on Friday, the 28th March, was not discharged until Monday, and that until this was done there was no berthage accommodation for the steamer by which the consignment was conveyed. The Company stated that, in the circumstances, it was not possible to have an earlier delivery effected. The Company added that they had made application for, but had not so far secured, increased berthage accommodation at Glasgow.

GREAT NORTHERN RAILWAY CO. (IRELAND) AND OTHER COMPANIES, 10th April, 1913.—That on the examination after delivery of a consignment of eggs forwarded on the 18th March from Clonsilla to Leicester it was found that 195 eggs were broken and that 110 eggs were missing.

A claim made in regard to the consignment was met.

LONDON AND NORTH WESTERN RAILWAY CO., 18th April, 1913.—That frequently serious delay occurred in the delivery of eggs forwarded from Ireland via Holyhead to Manchester.

The Company stated that the matter had been the subject of special investigations, and expressed the hope that the results would be beneficial.

LONDON AND NORTH WESTERN RAILWAY CO., 18th April, 1913.—That the transit of certain consignments of eggs sent to Manchester via the London and North Western Company's route from Dublin, Limerick, Galway, Kilkenny, Portadown, Macleodhill and Ballinacorney had been unsatisfactory, delay in delivery and split deliveries occurring.

The Company stated that special attention had been given to the question of the transit of Irish egg traffic, and that the causes for complaint had been removed.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 10th April, 1913.—That a 56-lb. box of butter forwarded on the 4th April from Gould's Cross to Dublin was not delivered until the morning of the 8th April.

The Department were informed that, as the 5th April (Saturday) was an early closing day, the butter was not sent out for delivery until Monday morning, that the subsequent delay was due to omission on the part of the carrier concerned, and that suitable notice had been taken of the occurrence.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; GREAT WESTERN RAILWAY CO., 22nd April, 1913.—That of two tins of cream forwarded on the 4th February from Charlville to Surrey, "one tin was spilled and broken and the other tin injured and one gallon of cream lost."

A claim made in the matter was settled.

LONDON AND NORTH WESTERN RAILWAY CO., 23rd April, 1913.—That consignments of mackerel which had been forwarded from Valentia, Co. Kerry, to Manchester Market, were not delivered on the 18th April until 9.10 a.m., the best returns being realised for consignments arriving not later than 6 a.m.

The Company stated that owing to a rough passage on the night of the 15th April their steamer from Greenore was late in arrival at Holyhead,

and that the traffic both from Dublin and Greenore was conveyed by the same train from Holyhead, delay consequently occurring.

LONDON AND NORTH WESTERN RAILWAY Co., 23rd April, 1913.—That Irish rabbits forwarded to Manchester market were not delivered until between 8 and 8.30 a.m., the best prices being obtainable for consignments arriving not later than 6 a.m.

The Department brought under the notice of the Co. the question of the early delivery of consignments.

GREAT SOUTHERN AND WESTERN RAILWAY Co. and OTHER COMPANIES, 26th April, 1913.—That a consignment consisting of two half-cases and two quarter-cases of eggs forwarded on the 11th December from Kilkenny to Wigan was delayed in transit, the full consignment not being tendered for delivery until the 18th December, that 76 eggs were broken in the consignment, that 11 eggs were missing, and that the loss consequent on delay and damage amounted to £1 6s. 6d.

It was stated that the London and North Western Company offered to pay the amount claimed in respect of the eggs broken and missing.

It appeared that the consignment was transferred at Dublin on the 12th December, that the subsequent delay was due to pressure of traffic and consequent scarcity of vehicles, and that the London and North Western Company were not prepared to meet the portion of the claim which related to delay.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 26th April, 1913.—That, with a view to ensure shipment at Cork on the date of despatch of consignments of butter forwarded via Cork from Charleville, by the train which reached Charleville about 12.30 p.m., arrangements should be made for the earlier arrival of the train at Cork.

The Company stated that, as an earlier start could not be made—the train having to await the arrival of connecting trains at Limerick Junction and to make subsequent connections—and in view of the amount of work to be done on the journey, it was not possible to fix an earlier hour of arrival in Cork.

GREAT SOUTHERN AND WESTERN RAILWAY Co., and OTHER COMPANIES, 26th April, 1913.—That seven 56-lb. boxes of butter sent on the 18th April and ten 56-lb. boxes sent on the 19th April from Ballygarry, Co. Limerick, to Motcombe, Dorset, did not reach their destination until the 25th April.

It appeared that both consignments were delivered on the 23rd April (a Sunday intervening). It was stated that, in the absence of a direct truck for conveyance by the English Companies, the best possible service was afforded in the circumstances.

GREAT SOUTHERN AND WESTERN RAILWAY Co. 7th May 1913.—That towards the end of the 1912 season the Company refused to continue to convey by the train leaving Listowel at about 4.30 p.m. stallions which were being returned to Abbeydorney—conveyance being by a train leaving about 8.30 p.m.

The Company stated that the practice of conveying horses by the 4.30 p.m. train had been discontinued on account of the delay occasioned by attaching and detaching horse vehicles. The Company also stated that owing to risk of injury during shunting operations they could not undertake to convey animals by a down goods train which left Listowel about 5.0 p.m.

GREAT SOUTHERN AND WESTERN RAILWAY Co., and OTHER COMPANIES, 13th May 1913.—That a case of eggs portion of a consignment of five cases, forwarded on the 12th April from Tuam to Kingston-on-Thames was not delivered at its destination.

A claim made in the matter was settled.

GREAT SOUTHERN AND WESTERN RAILWAY CO., and OTHER COMPANIES, 13th May 1913.—That a consignment of eggs forwarded on the 20th April from Tuen via Fishguard to Pontypriid was conveyed via Liverpool, was delayed several days in consequence, and was delivered in a badly damaged condition.

It was understood that a satisfactory settlement was arrived at.

GRAND CANAL CO., 17th May 1913.—That eggs bought in Scariff on Tuesday, the 13th May, and forwarded by one of the Company's boats to Killoe did not reach their destination until the following Friday at 7 p.m.

The Company stated that they did not receive a consignment of eggs at Scariff on the 13th May for Killoe, but that a consignment was handed to them at Scariff on the 16th May, at 1 p.m. The Company added that the consignment was sent forward at 1.45 p.m., no delay occurring.

GREAT SOUTHERN AND WESTERN RAILWAY CO. 22nd May 1913.—That a box of butter forwarded per passenger train service on the 16th May from Thurles to Dublin was not delivered until 1.30 p.m. on the 19th May.

The Company stated that the consignment reached Dublin in due course but that owing to a misunderstanding on the part of their carriers it was not sent out for delivery on Saturday the 17th May.

GREAT SOUTHERN AND WESTERN RAILWAY CO. and OTHER COMPANIES, 28th May 1913.—That five casks of butter forwarded on the 13th May from Chesham to Hull were delayed in conveyance.

It appeared from the inquiries which were made in the matter that only four of the casks were delivered to the consignee. A claim in respect of the missing cask was settled.

GREAT NORTHERN RAILWAY CO. (IRELAND). 17th June, 1913.—That on the examination after delivery of three boxes containing drawings and designs forwarded on the 7th May in good condition from Dublin to Maghera, it was found that the glass in the frames of five of the drawings was broken.

A claim in respect of replacing was met.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO.; LAIRD LINE LTD.; CALEDONIAN RAILWAY CO., 18th June, 1913.—That sixteen 28-lb. boxes of butter forwarded on the 18th June from Killeshandra, Co. Cavan, to Aberdeen were not delivered until the 18th June.

The Midland Great Western Co. stated that the consignment was handed to them on the 14th June and that the butter was transferred to the Laird Line at Dublin on that date. The latter Company informed the Department that the consignment was shipped on the 16th June (Monday), and reached Glasgow on the 17th June, when it was duly handed to the Caledonian Railway Co., delivery at Aberdeen being effected on the 18th June. It appeared that the consignment received the normal service by goods train.

MIDLAND RAILWAY CO. (NORTHERN COUNTRIES COMMITTEE). 21st June, 1913.—That a consignment of 25 boxes of butter forwarded on the 16th June from Arrington, Strabane, to London, was damaged in transit.

Inquiry was made in the matter. It appeared that, on delivery, consignees signed for the butter as "four boxes received loose," and that there was no evidence of further damage.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO.; GREAT SOUTHERN AND WESTERN RAILWAY CO. 24th June 1913.—That claims in respect of the loss sustained through delay in the conveyance of consignments of pigs forwarded to Cork from Ballyhaunis and Roscommon respectively, had not been met.

Complainants were asked for particulars as to the time of despatch and delivery in each case. The information has not been received.

SUMMARY OF THE DEPARTMENT'S ACTION IN CONNECTION WITH COMPLAINTS AS TO CHARGES BY CARRYING COMPANIES IN RESPECT OF THE CONVEYANCE OF MERCHANDISE.

Complaints made previous to the 1st July, 1912, in respect of which action was not completed when included in the summary printed in the Appendices to the Twelfth Annual General Report.

GREAT SOUTHERN AND WESTERN RAILWAY CO., CITY OF CORK STEAM PACKER CO., 11th September, 1911.—That through rates were not in force for the conveyance of live poultry from Newmarket, Co. Cork, to Plymouth and Devonport via Cork.

A rate of 6s. 9d. per cwt.—O.R., minimum 1 cwt.—was arranged for the traffic by routes other than via Cork. This information was conveyed to the complainants who did not pursue the matter further.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 15th December, 1911.—That refunds amounting to £12 4s. 10d., claimed in respect of consignments of cream forwarded by complainants from Charleville to Guildford, during the period from June to October—application having been made in June for the issue of a through rate which was put into operation on the 1st October—had not been made.

The Department had inquiries made in the matter.

It appeared that a refund of the amount was made.

GREAT NORTHERN RAILWAY CO. (IRELAND), 19th December, 1911, 26th December, 1911.—That the rates charged by the Great Northern Railway Co. for the conveyance of goods from Belfast to Armagh were high, when compared with the charges to Monaghan and Portadown.

The Department had inquiries made in the matter. It appeared that rates to Monaghan and Portadown were affected by waterway competition. The matter was explained to complainant.

LONDONDERRY AND LOUGH SWILLY RAILWAY CO. AND OTHER COMPANIES, 22nd February, 1912.—(1) That the rate—10d. per barrel—charged for the conveyance of cured herrings from Buncrana to Londonderry, a distance of 12 miles, was excessive.

(2) That the charges for the conveyance of fresh fish from Buncrana to London were excessive.

(3) That the charge—14s. per ton—for the conveyance of empty fish barrels sent from Londonderry to Buncrana was excessive.

(1) The Department were informed that the rate, including cartage at Londonderry, in operation for the traffic was 6s. 10d. per ton, and that there was no likelihood of a reduction.

(2) It appeared that the English Railway Companies concerned were not prepared to consider favourably the question of reductions.

(3) The Londonderry and Lough Swilly Co. considered the charge reasonable, in view of the small number of barrels that could be put in a wagon and of the handling and cartage necessary. The Company added that the numbers of barrels allowed to a ton were:—100 carrier barrels, 60 whole barrels, or 120 half barrels.

GREAT NORTHERN RAILWAY CO. (IRELAND), MIDLAND RAILWAY CO. (NORTHERN COUNTRIES COMMITTEE), 26th April, 1912.—That rates for the conveyance of goods between Strabane and Belfast had been increased without notice having been given to the public by the Companies.

The Department were informed that no increase had been made in permanent rates, but that certain temporary rates which expired on the

30th December, 1911, and which had been renewed to operate up to the 31st March, 1912, had been increased, and that verbal notice had been given to members of the public concerned.

The matter was one which could be brought before the Board of Trade under Section 31 of the Railway and Canal Traffic Act, 1838.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 20th May, 1912.—That the Great Southern and Western Railway Company had refused to convey by passenger train service at goods train rate butter forwarded from Ennis to Tipperary, although the goods train rate had applied to the conveyance of butter forwarded from Ennis to Tipperary by complainant, prior to the passing of the Great Southern and Western and Waterford, Limerick and Western Railway Companies Amalgamation Act, 1900, and had been continued up to the early part of 1912.

The Company stated that it was the case that prior to amalgamation complainant's butter had been carried from Ennis to Tipperary by passenger train at goods rates by the Waterford, Limerick and Western Railway Co.; that the arrangement was an irregular one, as it was not of general application, but applied only to complainant's butter and did not apply to traffic with stations other than Tipperary, and that on the practice coming to light it had been stopped, as the Company "could not continue a preference of the kind."

Complaints received during the period 1st July, 1912, to 30th June, 1913

GREAT NORTHERN RAILWAY CO. (IRELAND) AND OTHER COMPANIES, 15th and 28th August, 1912.—That the charges for the conveyance of honey from Enniskillen to Birmingham, London and Worthing were excessive.

The Department were informed that the following rates were in operation for the traffic:—

Goods Train Service.

	In coach or jam-packed in cases or drums	In the coach in sections in cases or Drum's Risk only	Passenger Train Service.
	PER TON	PER TON	PER CWT.
	s. d.	s. d.	s. d.
Enniskillen to Birmingham	65 0	85 0	5 10
Enniskillen to London	77 6	95 0	Owner's Risk

It did not seem that there was any likelihood of reductions in the figures.

It appeared that goods rates for honey were not in operation between Enniskillen and Stations on the London, Brighton and South Coast Railway, but that the traffic could be booked by passenger train service at 5s. 10d. per cwt. Owner's Risk.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 30th August, 1912.—That the rates, 11s. 9d. and 16s. 10d. per ton respectively, quoted by the Company for the conveyance of blackberries from Grange, Co. Kilkenny, and Waterford to Cork were high.

The following rates were issued for the 1912 season:—

Grange to Cork	14s. 2d. per ton	} Station to Station.
Waterford to Cork	12s. 6d. "	

(1) GREAT SOUTHERN AND WESTERN RAILWAY CO., (2) DUBLIN AND SOUTH EASTERN RAILWAY CO. AND GREAT SOUTHERN AND WESTERN RAILWAY CO., 24th September, 1912.—That the rates for the conveyance of blackberries from (1) Kilmenden, Co. Waterford, and Carrick-on-Suir and (2) New Ross to Cork, were high.

It appeared from inquiries made in the matter that no application for reductions had been made by complainants, a firm in Cork, to the Great Southern and Western Co. The Department learned that, on the receipt of such an application by the Company, the question would be favourably considered. It was suggested to complainants that such action should be taken. It was subsequently reported to the Department that no application had been made.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO. AND OTHER COMPANIES, 2nd, 29th and 31st October, 1912.—That the charges for the conveyance of pork from Boyle to London were excessive.

A reduced rate of 58s. 4d. per ton, goods train service, carted in London, was fixed to operate as from the 1st January, 1913.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 14th October, 1912.—That the rate 13s. 11d. per ton for the conveyance of butter from Waterford to Tipperary was excessive when compared with the rate, 13s. per ton, for the traffic between Clonmel and Liverpool via Waterford.

It appeared that the rate was at Company's Risk, and that the Company were not prepared to make any reduction.

The Department were informed that the rate of 13s. per ton (Owner's Risk) between Clonmel and Liverpool had been struck at a time when keen competition existed.

GREAT NORTHERN RAILWAY CO. (IRELAND), LONDON AND NORTH WESTERN RAILWAY CO., 31st October, 1912.—That charges for conveyance had been collected from the consignee in respect of two consignments of chickens forwarded carriage paid from Ballybeg, Co. Monagh, to Notting Hill, London.

The Department were informed that the amounts collected were refunded.

CAYAN AND LEITRIM RAILWAY CO., MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 4th November, 1912.—That a charge of 1s. 11d. was made for the carriage, by passenger train, of a drake (in crate) from Drumshanbo, Co. Leitrim, to Ballinasloe.

It appeared that the charge—Company's Risk—for the conveyance between the points of a package of poultry weighing 22 lbs. would be 1s. 11d. The weight of the drake and crate, however, was 14 lbs.

A refund of 8d. was made.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO. AND OTHER COMPANIES, 6th November, 1912.—That while the rate for the conveyance of live geese from Sligo to Liverpool was 3s. per cwt. and from Liverpool to Halesall 1s. per cwt., the rate from Sligo to Halesall was 5s. 3d. per cwt.

From inquiries which were made the Department learned that a rate of 4s. per cwt. was being applied in the case of consignments sent from Sligo to Halesall.

MIDLAND RAILWAY CO. (NORTHERN COUNTRIES COMMITTEE) AND OTHER COMPANIES, 18th November and 19th December, 1912.—That through rates were not in operation for the conveyance of butter from Ballymena to Perth.

It appeared that the Scottish Companies concerned were not prepared to agree to the fixing of through rates for the traffic between the points.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 16th November, 1912.—That a charge of 2s. 3d. made for the conveyance of 1 cwt. 1 qr. of hay spics from Balla, Co. Mayo, to Dublin was high.

The Company stated that the charge was at Class 2 instead of Class 1 rate and that a refund would be made.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO. AND OTHER

COMPANIES, 30th November, 1912.—(1) That a charge of 3s. 11½d. per cwt. was made for the conveyance of butter from Killeshandra, Co. Cavan, to Hull.

(2) That through rates were not in operation for the conveyance of butter from Killeshandra to Smethwick, Brierley Hill and Spon Lane, near Birmingham.

(1) A through rate of 44s. 2d. per ton, carted at Hull, was fixed.

(2) A through rate of 48s. 4d. per ton, carted in England, was arranged for the traffic to Smethwick, Brierley Hill (for Brierley Hill) and Spon Lane.

GRAND CANAL CO., 30th December, 1912.—That while the rate by rail for the conveyance of basic slag, in lots of six tons and upwards, from Waterford to Baginbown, was 4s. 6d. per ton, the Grand Canal Co. charged at the rate of 5s. 5d. per ton in respect of a consignment of 50 tons conveyed by them between the points.

The Department were subsequently informed that the matter had been satisfactorily arranged.

DUBLIN AND SOUTH EASTERN RAILWAY CO., MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 30th December, 1912.—That charges of 2s. 3d. and 4s. were made on consignees in respect of the conveyance from Enniscorthy to Ballinsloe and Ross, Co. Galway, of two turkeys which were forwarded carriage paid.

The amounts were refunded.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 17th December, 1912.—That consignee was charged 1s. 3d. in respect of the conveyance of a turkey which was forwarded to Attymon, Co. Galway, carriage paid. The amount was refunded to consignee.

GRANT NORTHERN RAILWAY CO. (IRELAND) AND OTHER COMPANIES, 23rd December, 1912.—That the rates, 95s. and 61s. 8d. per ton, for the conveyance of pork in crates from Virginia Road to London and Manchester, respectively, were excessive, and that a charge of 2s. 6d. was made for each returned empty crate.

The Grant Northern Co. stated that arrangements had been made to have a reduced rate of 72s. 6d. per ton put into operation for the traffic between Virginia Road and London. The Company were not prepared to consider favourably the question of a reduction in the Manchester figure which they considered reasonable. As regards the returned empties the Company stated that they were charged for in accordance with a scale of rates which was in operation for the traffic between England and Ireland.

GRANT SOUTHERN AND WESTERN RAILWAY AND OTHER COMPANIES, 24th December, 1912.—(1) That there were no through rates for the conveyance of cheese from Dungarvon to Cardiff, Newport, Swansea, Merthyr, Cheltenham, Llanelli, Ebbw Vale, Blenauon, Bargoed and Bristol.

(2) That through rates were not in operation for the traffic via Fishguard to Liverpool.

(3) That the rates to Belfast and Dublin, 41s. 2d. per ton and 28s. 4d. per ton respectively, were excessive.

(1) The following rates were fixed:—

Cardiff, Newport and Swansea, 22s. 2d. per ton; Merthyr and Cheltenham 34s. 2d. per ton; and Llanelli, Bristol, Ebbw Vale, Blenauon and Bargoed 28s. 4d., 30s. 10d., 31s. 4d., 30s., 38s. 4d. per ton respectively. All the rates, except that to Bristol, which was station to station, included carting in Great Britain.

(2) It appeared that the route was not regarded by the Companies as a suitable one for the traffic. The Department were informed, how-

over, that rates of 40s. 8d. per ton via Dublin and 36s. 8d. per ton via Waterford were in force.

(3) A reduced rate of 35s. per ton to Belfast was fixed for cheese in boxes, cases, crates or hampers, at Owner's Risk, station to station, the rate to remain in operation until the 31st December, 1913. It appeared that there was no likelihood of a reduction in the Dublin figure.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 1st, 15th and 16th January, 1913.—That the rates for the conveyance of dead meat from Athy to London were excessive.

The Great Southern and Western Co. informed the Department to the effect that any of the following rates would be put in operation for the traffic by passenger train service from Athy to London, if complainants informed the Company as to which figure they would avail themselves of:—

5s. 3d. per cwt. minimum 1 cwt. at Owner's Risk.	
5s. 0d. " " 5 cwt. "	
4s. 6d. " " 2 ton "	

The old rate was 5s. 10d. per cwt.

MIDLAND GREAT WESTERN RAILWAY CO. AND OTHER COMPANIES, 2nd January, 1913.—That the charges for the conveyance of a consignment of pork, forwarded from Kingscourt, Co. Cavan, to London, were excessive.

It appeared that the rate in force was 84s. 2d. a ton. A reduced rate of 60s. per ton, goods train service, Owner's Risk, carried in London, was fixed for the traffic, covered with cloths and packed in hampers.

CAVAN AND LINTHUM RAILWAY CO. AND OTHER COMPANIES, 2nd January, 1913.—That the rate, 58s. per ton, for the conveyance of pork from Arigna, Co. Roscommon, to London was excessive, when compared with the charges for such traffic between Boyle and London.

It appeared there was no prospect of a reduction in the Arigna rate. The Department were informed that the rate between Boyle and London was 58s. 4d. per ton.

DUBLIN AND SOUTH EASTERN RAILWAY CO., LONDON AND NORTH WESTERN RAILWAY CO., 7th January and 17th June, 1913.—That the rate—68s. 4d. per ton, for the conveyance of dead meat from Wicklow via Dublin and Holyhead to London was excessive.

The Dublin and South Eastern Co. stated that the rate in question was less, by 24s. 2d. per ton, than the class rate for the traffic.

BREAST AND COUNTY DOWN RAILWAY CO., GREAT NORTHERN RAILWAY CO. (IRELAND), MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 26th January, 1913.—That charges amounting to 11s. were made in regard to the conveyance of a mare and foal from Clonsilla, Co. Dublin, to Crossgar, Co. Down, although payment in respect of the return journey had been made when the animals were being forwarded from Crossgar to Clonsilla.

It appeared that 8s. of the amount was in respect of livery and leading at Belfast and the remaining 3s. for the transfer of the animals at Dublin from the Midland Great Western Co.'s station at North Wall to the Great Northern Co.'s, Amiens Street Station. The Department were informed that the Great Northern Co. were prepared to refund the charge of 8s., and it was suggested that complainant should communicate with the Company in the matter.

GRAND CANAL CO., 23rd January, 1913.—That the rates for the conveyance of (1) basic slag and (2) cotton meal from Kilshee to Scurriff, Co. Clare, were excessive.

It appeared that the Company were not prepared to reduce the rates.

GREAT NORTHERN RAILWAY CO. (IRELAND), GREAT SOUTHERN AND WESTERN RAILWAY CO., 27th JANUARY, 1913.—That a charge of 6s. 8d. was made for the conveyance of a consignment of five fowl from Strabane to Cork.

It was arranged that a refund of 2s. 6d. would be made.

GREAT NORTHERN RAILWAY CO. (IRELAND) AND OTHER COMPANIES, 31st JANUARY, 1913.—That the rates for the conveyance of (1) poultry from Bundoran to Birmingham and Sheffield and (2) pork from Bundoran to London, Liverpool and Manchester were high.

Inquiries were made in the matter. It did not appear that there was any likelihood of reductions.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 1st FEBRUARY, 1913.—That a charge of 1s. 11d. was made in respect of the conveyance of a consignment (2 qrs 17 lbs.) of salt, butter paper and packages, from Limerick to Nenagh.

It appeared that, owing to a clerical error, an overcharge of 1s. was made in the case. The Company arranged to refund that amount.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 11th FEBRUARY, 1913.—That the charge, 5s. 10d. per cwt., for the conveyance of cream forwarded from Charleville via Dublin to Leicester was high.

Arrangements were made to apply a rate of 4s. 9d. per cwt. to the traffic. The Department were also informed that, if particulars regarding any consignments in respect of which the higher rate was charged were furnished to the Great Southern and Western Co., a refund would be made. Complainant was informed accordingly.

COUNTY DONEGAL RAILWAYS JOINT COMMITTEE, GREAT NORTHERN RAILWAY CO. (IRELAND), MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 22nd FEBRUARY, 1913.—That a charge of \$6 12s. made in respect of the conveyance of a consignment of fencing material, weighing about 4 ton 7 cwt., forwarded from Stranorlar, Co. Donegal, to Clifden, Co. Galway, was excessive.

Arrangements were made to apply a reduced through rate of 21s. 10d. per ton to the consignment. A refund of £1 17s. was made.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO. AND OTHER COMPANIES, 25th FEBRUARY, 1913.—That the charges for the conveyance of dead meat from Woodlawn, Co. Galway, to London should be reduced.

A reduced rate of 65s. per ton was arranged for the conveyance by goods train service of pork, covered with cloths, packed in closed hampers, Owner's Risk, carted in London.

LONDONDERRY AND LONDON SWILLY RAILWAY CO., COUNTY DONEGAL RAILWAYS JOINT COMMITTEE, 26th FEBRUARY and other dates.—That the charges for the conveyance of certain consignments of equipment forwarded by Domestic Economy Instructions,

- (1) on the 30th November, from Cashinagore to Killybegs;
- (2) on the 22nd January, from Newtownsunningham to Killybegs;
- (3) on the 22nd March, from Killybegs to Glenties;
- (4) on the 4th April, from Killybegs to Strabane;
- (5) on the 21st June, from Dungloe to Carradonagh,

were excessive.

The matter was brought under the notice of the Companies who made reductions in the charges.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 26th February, 1913.—That the charges for the conveyance of dead meat from Lomhardstown Co. Cork, to London were high.

The matter is receiving attention.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 26th March, 1913.—(1) That there were no through rates in operation for the conveyance of butter from Kilmallock to Newcastle-on-Tyne, North Shields, South Shields, Edinburgh and Leith.

(2) That through rates were not available, *via* the Dublin and Sillioth route, for consignments of butter sent from Kilmallock to Tynemouth.

(1) The question of through rates to Newcastle-on-Tyne, North Shields and South Shields, has not so far been determined. As regards rates to Edinburgh and Leith, it appeared that Scottish Railway Companies were not prepared to agree to through rates to interior Scottish stations.

(2) It appeared that there were no through rates in operation *via* the route from interior Irish stations, and that there was no prospect of such rates being put into force.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 26th March and 25th April, 1913.—That through rates were not in operation for the conveyance of butter from Kilmallock to Sunderland, and that the charges for the traffic were excessive.

A through rate of 62s. 6d. per ton *via* Dublin, goods train service and carried in Sunderland, was fixed.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., GREAT SOUTHERN AND WESTERN RAILWAY CO., 19th April, 1913.—That a charge of 25 ls. 6d. made for the conveyance of a seven ton lot of potatoes forwarded from Clifden, Co. Galway, to Cork, was excessive.

A reduced rate of 12s. 6d. per ton has been put into force, between the places, for potatoes in sacks, in six ton loads, at Owner's Risk, owner to load and unload, station to station.

GREAT NORTHERN RAILWAY CO. (IRELAND), G. & J. BURNS, LTD., 28th June, 1913.—That the rate for the conveyance of new potatoes, in barrels from Rush and Lusk, Co. Dublin, to Glasgow had been increased from 14s. 6d. to 17s. per ton.

It appeared that the increase was due to the fixing of a higher charge in respect of the conveyance by sea.

SALE OF FOOD AND

I.—STATEMENT GIVING PARTICULARS AS TO SAMPLES OF BUTTER,
ACTS IN THE COUNTIES

COUNTY.	Butter.				Margarine.	
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Prosecutions.
Antrim,	83	2	2	£ s. d. 0 3 6	6	—
Armagh,	132	—	—	—	6	—
Carlow,	76	1	1	0 17 6	3	—
Cavan,	102	—	—	—	1	—
Clare,	191	3	3	1 15 0	2	—
Cork,	734	10	10	6 15 11	11	—
Down,	128	—	—	—	7	—
Dublin,	106	1	1	0 2 6	14	—
Fermanagh,	217	2	2	5 0 0	18	1
Galway,	54	1	1	0 2 6	1	—
Kerry,	170	4	1	0 15 6	9	2
Kildare,	290	19	18	13 11 2	4	—
Kilkenny,	117	1	1	1 13 6	14	1
King's,	56	—	—	—	—	—
Leitrim,	176	7	7	3 18 11	11	—
Limerick,	63	—	—	—	—	—
Londonderry,	209	3	3	1 16 7	2	—
Longford,	55	—	—	—	—	—
Louth,	57	—	—	—	1	—
Mayo,	61	—	—	—	2	1
Meath,	198	2	2	1 7 6	12	—
Monaghan,	40	—	—	—	3	—
Queen's,	26	—	—	—	5	—
Roscommon,	73	2	1	0 13 6	—	—
Sligo,	75	—	—	—	1	—
Tipperary (N.E.),	34	—	—	—	—	—
Tipperary (S.E.),	128	—	—	—	1	—
Tyrone,	101	4	3	1 12 6	6	—
Waterford,	127	1	1	0 2 6	1	—
Westmeath,	130	2	2	0 2 0	—	—
Wexford,	127	—	—	—	4	—
Wicklow,	68	—	—	—	6	—
Wicklow,	106	1	1	0 12 6	7	4
Total,	4,349	60	60	41 3 1	158	9
Total for Year 1912,	4,242	164	152	97 1 2	80	7

One sample of Margarine-Cheese was taken in Co. Antrim during the period. There was no infringement of the Acts in regard to the sample.

[207]

DRUGS ACTS, 1875 to 1899.

MARGARINE, CHEESE AND MILK TAKEN BY INSPECTORS UNDER THE
DURING THE YEAR 1912.

No. of Convictions	Penalties imposed	Cheese.	Milk.			
		No. of Samples taken.	No. of Samples taken.	No. of Prosecu- tions.	No. of Convictions.	Penalties imposed.
	£ s. d.					£ s. d.
—	—	34	128	2	1	0 2 6
—	—	23	95	6	6	10 10 6
—	—	7	94	8	6	24 13 6
—	—	17	68	1	—	—
—	—	4	135	2	2	1 0 8
—	—	8	682	22	15	10 14 11
—	—	52	77	1	1	0 4 0
—	—	54	127	8	7	8 13 0
1	1 0 0	24	809	13	13	19 17 6
—	—	3	19	—	—	—
1	1 13 6	23	277	12	12	15 19 2
—	—	18	243	6	6	2 6 11
1	0 2 6	18	83	3	3	2 6 6
—	—	3	87	1	1	0 4 6
—	—	17	100	4	4	1 1 0
—	—	20	42	1	1	0 16 6
—	—	11	572	8	6	4 6 9
—	—	24	21	—	—	—
—	—	2	67	2	1	0 2 6
—	—	—	53	1	1	0 8 0
—	—	9	222	17	11	17 17 6
—	—	43	64	—	—	—
—	—	6	19	1	1	0 13 0
—	—	6	60	5	3	3 12 0
—	—	5	161	6	4	4 3 6
—	—	6	29	4	4	2 10 0
—	—	8	187	3	3	7 17 6
—	—	4	343	14	10	12 11 6
—	—	54	91	8	6	1 17 6
—	—	7	107	2	2	1 5 6
—	—	24	216	6	4	2 4 7
—	—	6	62	4	2	3 12 6
4	2 18 6	22	69	5	3	3 13 6
7	5 14 6	374*	5,227	172	137	162 17 2
6	5 9 0	359†	4,946	162	135	169 6 9

*No proceedings were instituted in respect of any of these samples.

†Proceedings in one case in Co. Antrim. Case was dismissed.

II.—STATEMENT GIVING PARTICULARS AS TO SAMPLES OF BUTTER,
THE ACTS IN THE COUNTIES DURING

COUNTY.	Butter.				Margarine.	
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Prosecutions.
Antrim,	56	2	2	£ s. d. 0 18 0	4	—
Armagh,	57	—	—	—	3	—
Carlow,	86	—	—	—	2	—
Cavan,	55	2	2	1 6 0	1	—
Clare,	81	—	—	—	—	—
Cork,	273	7	6	4 8 1	2	—
Donegal,	92	1	1	0 19 0	5	—
Down,	55	—	—	—	15	2
Dublin,	120	—	—	—	4	—
Fermanagh,	31	—	—	—	1	—
Galway,	63	3	3	2 18 6	—	—
Kerry,	212	16	12	6 18 11	2	—
Kildare,	57	—	—	—	6	—
Kilkenny,	50	—	—	—	—	—
King's,	60	3	3	1 1 3	1	—
Lettin,	26	—	—	—	—	—
Limerick,	196	2	1	0 15 7	5	—
Londonderry,	57	—	—	—	7	—
Longford,	31	—	—	—	—	—
Louth,	31	—	—	—	—	—
Mayo,	80	—	—	—	6	—
Meath,	55	1	—	—	5	—
Monaghan,	19	—	—	—	2	—
Queen's,	30	1	—	—	—	—
Roscommon,	40	—	—	—	1	—
Sligo,	18	—	—	—	—	—
Tipperary (N.R.),	74	1	1	0 5 0	5	1
Tipperary (S.R.),	52	—	—	—	—	—
Tyrone,	56	1	1	0 15 0	3	—
Waterford,	46	2	2	0 12 7	—	—
Westmeath,	83	3	3	2 18 0	4	—
Wexford,	34	—	—	—	10	—
Wicklow,	47	—	—	—	3	—
Total,	2,303	45	37	23 13 11	97	3

[299]

MARGARINE, CHEESE AND MILK TAKEN BY INSPECTORS UNDER
THE HALF-YEAR ENDED 30TH JUNE, 1918.

		Cheese.		Milk.		
No. of Convictions.	Penalties imposed.†	No. of Samples taken.	No. of Samples taken.	No. of Prosecu- tions.	No. of Convictions.	Penalties imposed.
	£ s. d.					£ s. d.
—	—	19	72	7	6	2 0 9
—	—	12	61	3	3	4 14 6
—	—	7	42	1	1	1 4 6
—	—	8	27	2	1	0 17 0
—	—	1	33	2	2	1 7 0
—	—	7	334	2	6	7 17 9
—	—	33	47	1	1	0 2 6
—	—	33	75	1	1	1 0 0
1	0 18 6	11	531	19	17	23 5 0
—	—	3	18	1	1	0 7 0
—	—	12	146	14	13	10 3 6
—	—	9	161	2	2	2 6 7
—	—	8	42	1	1	2 14 0
—	—	1	23	2	1	0 2 6
—	—	8	45	2	2	0 18 0
—	—	9	18	4	4	3 14 6
—	—	8	186	6	4	2 14 1
—	—	12	62	4	4	1 19 0
—	—	4	33	3	3	0 15 6
—	—	—	29	6	4	2 0 0
—	—	4	95	9	6	5 12 0
—	—	18	33	4	4	6 5 0
—	—	4	22	2	2	0 3 0
—	—	3	18	1	—	—
—	—	8	75	7	7	7 17 0
—	—	2	16	1	—	—
1	0 6 6	3	98	2	2	1 16 0
—	—	1	198	11	9	8 18 4
—	—	28	53	6	6†	16 18 0
—	—	2	50	2	—	—
—	—	7	104	5	5	2 18 0
—	—	11	74	6	6	7 19 7
—	—	11	42	3	3	4 8 6
2	1 2 0	307*	2,503	149	127	132 19 1

* No proceedings were instituted in respect of any of these samples.

† An appeal has been lodged in respect of one of these cases.

III.—STATEMENTS GIVING PARTICULARS AS TO SAMPLES OF
UNDER THE ACTS
YEAR 1912.

BOROUGH.	Butter.				Margarine.	
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Prosecutions.
Belfast, . . .	100	1	1	£ s. d. 3 0 0	10	—
Glennel, . . .	24	1	1	1 10 0	—	—
Cock, . . .	132	3	3	1 6 6	—	—
Drogheda, . . .	16	—	—	—	—	—
Dublin, . . .	133	1	1	1 0 0	—	—
Kilkenny, . . .	13	—	—	—	—	—
Limerick, . . .	171	2	—	—	4	—
Londonderry, . . .	34	—	—	—	—	—
Sligo, . . .	20	—	—	—	4	—
Waterford, . . .	70	—	—	—	—	—
Wexford, . . .	49	1	1	0 19 0	5	—
Total, . . .	771	9	7	7 13 6	33	—
Total for Year 1912, . . .	780	40	39	99 15 0	69	3

HALF-YEAR ENDED 30TH JUNE, 1913.

BOROUGH.	Butter.				Margarine.	
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Prosecutions.
Belfast, . . .	66	3	3	£ s. d. 6 10 0	19	3
Glennel, . . .	16	—	—	—	—	—
Cock, . . .	69	—	—	—	—	—
Drogheda, . . .	12	—	—	—	—	—
Dublin, . . .	117	2	2	5 0 0	3	3
Kilkenny, . . .	11	—	—	—	—	—
Limerick, . . .	89	5	5	0 11 6	5	—
Londonderry, . . .	17	—	—	—	—	—
Sligo, . . .	6	—	—	—	2	—
Waterford, . . .	25	—	—	—	1	—
Wexford, . . .	30	—	—	—	3	—
Total, . . .	458	10	10	12 1 6	33	3

[391]

**BUTTER, MARGARINE, CHEESE AND MILK TAKEN BY INSPECTORS
IN THE BOROUGH.**

YEAR 1912.

		Cheese.	Milk.			
No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
	£ s. d.					£ s. d.
—	—	4	550	72	68	82 0 0
—	—	—	30	3	3	2 6 0
—	—	—	452	31	30	28 1 0
—	—	—	136	1	1	2 10 6
—	—	—	1100	69	66	167 12 6
—	—	1	52	—	—	—
—	—	8	506	7	7	5 0 0
—	—	5	43	12	11	10 8 6
—	—	7	96	8	7	6 10 3
—	—	—	149	12	12	10 9 0
—	—	2	153	11	10	8 11 6
—	—	27*	3,467	226	216	323 4 3
3	4 0 0	22*	3,153	259	266	521 15 9

HALF-YEAR ENDED 30TH JUNE, 1913.

		Cheese.	Milk.			
No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
	£ s. d.					£ s. d.
4	2 10 0	4	353	46	31	62 17 6
—	—	—	24	1	1	1 10 0
—	—	—	191	12	9	12 12 6
—	—	—	51	—	—	—
3	3 0 0	—	552	62	62	104 10 0
—	—	—	18	—	—	—
—	—	10	314	8	7	3 5 0
—	—	—	17	2	2	0 15 0
—	—	4	41	—	—	—
—	—	—	140	14	10	8 11 5
—	—	2	61	2	1	1 10 0
7	6 10 0	20*	1,762	147	113	186 11 5

* No proceedings were instituted in respect of any of these samples.

IV.—STATEMENT GIVING PARTICULARS AS TO SAMPLES OF BUTTER AND MARGARINE TAKEN, UNDER THE SALE OF FOOD AND DRUGS ACTS, 1875 TO 1899, BY THE DEPARTMENT'S OFFICERS DURING THE YEAR 1912.

BOROUGH OR COUNTY.	BUTTER.				MARGARINE.			
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
Borough.				£ s. d.				£ s. d.
Clonmel, . . .	3	—	—	—	—	—	—	—
Cork, . . .	6	—	—	—	—	—	—	—
Drogheda, . . .	4	—	—	—	—	—	—	—
Dublin, . . .	3	1	1	5 0 0	1	1	1	2 0 0
Kilkenny, . . .	8	—	—	—	—	—	—	—
Sligo, . . .	3	—	—	—	—	—	—	—
Waterford, . . .	3	—	—	—	—	—	—	—
County.								
Antrim, . . .	7	—	—	—	—	—	—	—
Armagh, . . .	47	1	1	0 2 0	1	—	—	—
Carlow, . . .	21	—	—	—	—	—	—	—
Cavan, . . .	12	—	—	—	—	—	—	—
Clare, . . .	10	—	—	—	—	—	—	—
Cork, . . .	119	3	3	2 7 7	1	1	1	2 2 3
Down, . . .	47	—	—	—	—	—	—	—
Dublin, . . .	43	—	—	—	1	—	—	—
Fermanagh, . . .	23	—	—	—	—	—	—	—
Galway, . . .	6	—	—	—	—	—	—	—
Kerry, . . .	31	7	3	1 18 8	—	—	—	—
Kildare, . . .	32	—	—	—	1	—	—	—
Kilkenny, . . .	15	—	—	—	—	—	—	—
King's, . . .	33	2	2	0 8 0	—	—	—	—
Leitrim, . . .	11	—	—	—	—	—	—	—
Limerick, . . .	40	—	—	—	—	—	—	—
Londonderry, . . .	12	—	—	—	—	—	—	—
Longford, . . .	3	—	—	—	—	—	—	—
Louth, . . .	11	—	—	—	—	—	—	—
Meath, . . .	20	—	—	—	—	—	—	—
Monaghan, . . .	22	—	—	—	—	—	—	—
Queen's, . . .	28	—	—	—	—	—	—	—
Roscommon, . . .	6	—	—	—	—	—	—	—
Sligo, . . .	9	—	—	—	—	—	—	—
Tipperary (N.R.), . . .	25	—	—	—	—	—	—	—
Tipperary (S.R.), . . .	29	—	—	—	—	—	—	—
Tyrone, . . .	45	—	—	—	—	—	—	—
Waterford, . . .	20	—	—	—	—	—	—	—
Westmeath, . . .	20	—	—	—	—	—	—	—
Wexford, . . .	10	—	—	—	—	—	—	—
Wicklow, . . .	44	1	1	0 12 0	—	—	—	—
Total, . . .	870	15	11	10 8 3	5	2	2	4 8 3

[303]

V.—STATEMENT GIVING PARTICULARS AS TO SAMPLES OF BUTTER
TAKEN UNDER THE SALE OF FOOD AND DRUGS ACTS,
1875 TO 1899, BY THE DEPARTMENT'S OFFICERS
DURING THE HALF-YEAR ENDED THE 30TH JUNE, 1913.

BOROUGH OR COUNTY.	BUTTER.			
	No. of Samples taken.	No. of Prosecu- tions.	No. of Convic- tions.	Penalties imposed
BOROWNS.				£ s. d.
Drogheda,	3	—	—	—
Dublin,	5	2	2	8 0 0
Kilkenny,	11	—	—	—
Sligo,	3	—	—	—
Wexford,	3	—	—	—
COUNTIES.				
Antrim,	32	1	1	0 4 6
Carlow,	12	—	—	—
Cavan,	18	1	1	0 13 6
Clara,	21	—	—	—
Cork,	39	—	—	—
Donegal,	12	—	—	—
Down,	28	1	1	0 12 6
Dublin,	32	1	1	7 0 0
Fermanagh,	18	—	—	—
Galway,	12	—	—	—
Kerry,	6	1	1	1 4 9
Kildare,	39	—	—	—
Kilkenny,	5	—	—	—
King's,	32	2	2	0 16 0
Leitrim,	3	—	—	—
Limerick,	29	—	—	—
Londonderry,	9	—	—	—
Longford,	14	—	—	—
Louth,	9	—	—	—
Mayo,	21	—	—	—
Meath,	22	1	—	—
Monaghan,	16	—	—	—
Queen's,	23	2	2	0 6 0
Roscommon,	10	1	1	0 2 6
Sligo,	9	—	—	—
Tipperary (N.R.),	9	—	—	—
Tipperary (S.R.),	8	—	—	—
Tyrone,	12	1	1	0 16 0
Westmeath,	27	1	1	0 13 6
Wexford,	8	—	—	—
Wicklow,	36	1	1	2 10 6
Total,	584	16	16	23 17 9

VI.—STATEMENT SHOWING, AS ON THE 30TH JUNE, 1913, THE NUMBER AND DISTRIBUTION OF PREMISES REGISTERED FOR THE MANUFACTURE OF, OR WHOLESALE DEALINGS IN, MARGARINE OR MARGARINE-CHEESE.

BOROUGH OR COUNTY.	No. of Premises Registered for Wholesale Dealings in Margarine or Margarine- Cheese.	No. of Premises Registered for the Manufacture of	
		Margarine.	Margarine- Cheese.
Borough.			
Belfast,	52	—	—
Cleonsal,	2	—	—
Cork,	9	2	—
Drogheda,	1	—	—
Dublin,	41	—	—
Limerick,	3	2	—
Londonderry,	2	—	—
Sligo,	1	—	—
Waterford,	7	1	—
Wexford,	1	—	—
County.			
Antrim,	5	—	1
Armagh,	1	—	—
Down,	1	—	—
Dublin,	5	—	—
Fermanagh,	1	—	—
Galway,	2	—	—
Kerry,	1	—	—
King's,	2	—	—
Louth,	1	—	—
Tipperary (S.R.),	1	—	—
Westmeath,	1	—	—
Wexford,	—	1	—
Total,	160	6	1

VII.—STATEMENT SHOWING, AS ON THE 30TH JUNE, 1913, THE NUMBER AND DISTRIBUTION OF PREMISES REGISTERED AS BUTTER FACTORIES.

Borough.	No. of Registered Butter Factories.	County.	No. of Registered Butter Factories.
Belfast,	1	Fermanagh,	3
Cork,	21	Kerry,	26
Dublin,	1	Leitrim,	3
Limerick,	3	Limerick,	2
Londonderry,	1	Londonderry,	1
Waterford,	1	Longford,	3
		Monaghan,	6
County.		Tipperary (N.R.),	1
Antrim,	2	Tipperary (S.R.),	1
Armagh,	2	Tyrena,	4
Carlow,	1	Waterford,	5
Cavan,	33	Wexford,	5
Clare,	2	Wicklow,	2
Cork,	41		
Donnegal,	2	Total,	171

[303]

BUTTER AND MARGARINE ACT, 1907.

(Sections 3 and 14 (1).)

List of Names approved by the Department during the year ended the 30th June, 1913, for use in connection with Margarine.

Note.—Approval by the Department authorizes the use of the name in Ireland only. Approval does not confer on any person any exclusive right to the use of the name, nor authorize its use by any person not entitled to use it.

Ace	Domino	Luxette	Radium
Aero	Duck	Luxo	Ransom
Ajex			Rosemary
Alba	Eagle	Marathon	Ruba
Albina	Elix	May Blossom	
Alma	Embassy	Maybreeze	Saracen
Almar	Express	Mellownut	Scout
Alpha		Mento	Shell Brand
Arcadian	Farola	Metro	Silver Crescent
Aurorian	Feather	Minnich	Silverine
Argory	Featherweight	Mirror	Silverstar
Astral	Forester	Mitre	Sirdar
Attorney	Forte	Monarch	Snap
		Musket	Soldier
Bantam	Game Cock		Spendo
Baronia	Globe	Napoleon	Spyro
Bastile	Globe	Niobe	Stella
Bitter	Golden Fleece	Noctona	
Bonnie Brier	Goldseek	Normair	Torpedo
Bouquet	Goliath	Notchall	
Bramble	Griffin		Unicom
Brier		Old Pall	Unity
Butler Brand	Harmony	Omega	University
	Herald		
Carnival	Heraldic	Parade	Vanco
Cavalier	Hercules	Peach	Vanguard
Centaurus	Hillrise	Peanut	Velvet
Challenge		Penelope	Venus
Chancellor	Ivanhoe	Pharos	Victor
Citizen		Phoenix	Victrix
Clorima	Judge	Pierrot	Vulcan
Clipper	Jupiter	Plato	
Cobno		Poppy	Walno
Comet	Kambal	Pri-Eitz	Waverley
Cucumber		Puffi	White Star
Cupid	Lion		White Thorne
Cygnat	Lion & Unicom	Quest	Wild Wood
	Lobby		Woodland
Delta	Loving Cup	Radax	Zenith

LIST of ANALYSTS acting under the Sale of Food and Drugs Acts,
1875 to 1907, for the Boroughs and Counties in Ireland.

Local Authorities.	Name of Analyst.
COUNCILS OF BOROUGHES OF:—	
Belfast,	J. Harold Totton, B.A., B.Sc., A.I.C.
Clonmel,	Sir C. A. Cameron, C.B., M.D.
Cork,	D. J. O'Mahony, F.R.S.
Drogheda,	Sir C. A. Cameron, C.B., M.D.
Dublin,	Do., do.
Kilkenney,	Do., do.
Limerick,	Do., do.
Londonderry, . . .	Professor John Robinson Leebody, M.A., B.Sc., F.R.C.
Sligo,	Sir C. A. Cameron, C.B., M.D.
Waterford,	Do., do.
Wexford,	Do., do.
COUNTY COUNCILS OF:—	
Antrim,	T. R. Hodgson, M.A., F.R.C., and J. F. W. Hodges, F.R.C., F.R.S.*
Armagh,	J. Harold Totton, B.A., B.Sc., A.I.C.
Carlow,	Sir C. A. Cameron, C.B., M.D.
Cavan,	Do., do.
Clare,	Do., do.
Cork,	D. J. O'Mahony, F.R.S.
Donegal,	Charles McMillan.
Down,	Sir C. A. Cameron, C.B., M.D.
Dublin,	Do., do.
Fermanagh,	Do., do.
Galway,	Do., do.
Kerry,	D. J. O'Mahony, F.R.S.
Kildare,	Sir C. A. Cameron, C.B., M.D.
Kilkenny,	Do., do.
King's,	D. J. O'Mahony, F.R.S.
Lisburn,	Sir C. A. Cameron, C.B., M.D.
Limerick,	Do., do.
Londonderry, . . .	J. Harold Totton, B.A., B.Sc., A.I.C.
Longford,	Charles McMillan.
Louth,	Sir C. A. Cameron, C.B., M.D.
Mayo,	Do., do.
Meath,	Do., do.
Monaghan,	Do., do.
Queen's,	Do., do.
Roscommon,	Do., do.
Sligo,	Do., do.
Tipperary, North Riding.	Do., do.
Do., South Riding.	Do., do.
Tyrone,	Robert F. Blake, F.R.C.
Waterford,	Sir C. A. Cameron, C.B., M.D.
Westmeath,	Do., do.
Wexford,	Do., do.
Wicklow,	Do., do.

* Mr. Hodges acts as Analyst for the District of Carrickfergus.

[307]

**MARKETS AND FAIRS (WEIGHING OF CATTLE)
ACTS, 1887 AND 1891.**

List showing the Fairs and Auction Marts in respect of which
Exemption Orders were issued between the 1st July, 1912,
and the 30th June, 1913.

Fair or Mart.	County or Borough.
Ballynacally.	Clare.
Ballynacostello.	Mayo.
Ballynabber.	Roscommon.
Ballyconnell.	Cavan.
Blennerville.	Kerry.
Bunlaghy.	Longford.
Cellan, Patrick Grainger's Mart.	Kilkenny.
Corbury.	Kildare.
Castlehacketh.	Galway.
Castleplunket.	Roscommon.
Charleville, M. S. Sheedy's Marts (two).	Cork.
Charleville, Miller & Mannix's Marts (two).	Cork.
Clewaddan.	Clare.
Croom.	Limerick.
Culdaff.	Donegal.
Doonamon.	Mayo.
Drumdeer.	Cork.
Emly.	Tipperary.
Finea.	Westmeath.
Furry.	Roscommon.
Hugginstown.	Kilkenny.
Killmore.	Galway.
Limerick, Pitt's Marts (two).	Limerick (Borough of).
Malahiffe.	Kerry.
Mukanny.	Mayo.
Multybarham.	Westmeath.
Newtownards.	Down.
Rahmolyon.	Meath.
Roundwood.	Wicklow.
Rushwood.	Kildare.
Spacill.	Clare.

REPORT OF THE DIRECTOR OF THE GEOLOGICAL SURVEY OF IRELAND

For the Year ending 31st March, 1913.

TO THE SECRETARY, DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

SIR,—I have the honour to submit the following Report on the work of the Geological Survey of Ireland for the year ending 31st March, 1913.

Areas in the counties of Donegal and Londonderry were geologically mapped upon the six-inch scale, including the interesting country on the edge of the basalt escarpment near Lamevady. The examination of the country south of Killybegny and around Kenmare, especially in regard to its superficial deposits, was completed, and a memoir that should prove of equal interest to residents and visitors is in progress, based on that now out of print, which was issued in 1859.

The Memoir on Clare Island, forming a study of a typical western outpost of Europe, was completed and sent in for printing.

A chapter showing the influence of the superficial deposits on the agriculture of the district was added to the Monaghan Memoir, which is now in the Press.

The superficial deposits used as sources of lime in the county of Wexford, including those often styled "manure gravels," were examined in view of the conflicting statements previously published respecting their geological position.

The results of new borings in the Leinster coalfield were corrected. Guidance was given in the field to a party of members of the Geologists' Association, who visited under the conduct of their President, Dr. J. W. Evans, F.R.S., the districts of Southern Mayo, Sligo, and Southern Donegal. The interchange of views arising from such visits is obviously of permanent value to the Staff of the Geological Survey.

With the approval of H.M. Treasury, the services of Mr. J. B. KILGUS, whose retirement would normally have taken place under the age-limit rule on 27th March, 1913, were continued until 28th June of that year, in order that he might complete his survey of the Limerick area. Mr. A. I. REEKES was employed as a temporary professional assistant, for the special work of collecting specimens of fossil plants that would prove useful in correlating the coal-bearing strata of Ireland.

The sheet of the quarter-inch geological map covering the country north of Belfast was prepared for reproduction by the Ordnance Survey.

[309]

A large number of hand-coloured sheets of the one-inch map of the south of Ireland, and a few representing northern areas, were re-edited, to bring them into harmony with one another, and to rectify matters of classification in the Old Red Sandstone series which could no longer be sustained.

A large raised model prepared in the Royal College of Science to represent the structure and surface-features of the country near Dublin was coloured geologically for the College.

A number of enquiries were dealt with concerning water-bearing strata, road-metal, and the positions of coal-seams and mineral lodes.

The following papers were contributed by members of the Staff of the Survey:—

G. A. J. COLE.—"The Problem of the Liffey Valley." *Proc. R. Irish Acad.*, 30B. (1912), 8.

T. HALLISSEY.—"On the superficial deposits of the County of Wexford." *Irish Naturalist*, 21 (1912).

W. B. WAGNER.—"Submerged Forests in certain inland lakes in Donegal." *Geol. Mag.*, 1912, 115.

W. B. WAGNER.—"The Drumlin Topography of S. Donegal." *Geol. Mag.*, 1912, 153.

I am, Sir,

Your obedient Servant,

GRENVILLE A. J. COLE.

REPORT OF THE DIRECTOR
OF THE
NATIONAL MUSEUM OF SCIENCE
AND ART
FOR THE
YEAR 1912-1913.

TO THE SECRETARY OF THE DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND

SIR,—I have the honour to submit the following Report for the twelve months from 1st April, 1912, to 31st March, 1913.

In presenting my Annual Report I have the pleasure to state that the number of visitors to the National Museum of Ireland shows a continued increase; for the year ending 31st March, 1913, the attendance was 285,127, being 6,559 over the previous year. The utilisation of the Museum for educational purposes has been further developed. The work of the students covers a large range of subjects, including zoology, geology, and mineralogy, botany, art and industries, classical archaeology and Irish antiquities, and the professors of these various studies make frequent visits to the Museum for the purpose of demonstration.

In the Natural History Section, 520 more workers were registered for the students' room and office this year than last, besides some 500 research students whose work is of more permanent value. In the Natural History Section alone there are about 3,000 students at present; in the Botanical Section the number recorded was 422. In the Art Division numerous art students attended (besides many craft people from workshops and technical schools), and the Irish Antiquities Division was visited by many students of Irish archaeology from the Universities.

The Natural History collections underwent considerable rearrangement during the year, after the re-colouring of the Lower Room. The real impediment to the grouping of allied collections is caused by the extreme restriction of the space on the ground floor. The Botanical Section, which should be brought into relation with zoology and geology, is still so placed that the ordinary public seldom discovers the collections, and students are much impeded in the carrying out of their work. The same impediment is in the way of the proper arrangement of portions of the Art and Industries Section, in which objects having no connexion with one another are crowded together, and the illustrations of the Classics and of Egyptology are quite unworthily presented. Indeed, some of the most interesting objects have still to remain stored away and unavailable for public use. When, however, the proposed new wing of the Museum becomes available, it is hoped that these drawbacks will be removed.

The accessions of objects during the year include some interesting material relating to Ireland: King William's sword used at the Boyne, and plan of the battle, lent by Mr. Blayney Ballinacorney; the Libanus bronze rapier and the beautiful swords from Tempo, purchased for the Irish Antiquities Collection, and Dr. Neil Munro's gift of a collection of prehistoric objects from Japan, which are very valuable for comparison with the earliest Irish remains. I have been able with the kind assistance of Mr. Copley to bring together a fine collection of lithographs recently executed by members of the Sarsfield Club. I subsequently gave a Museum lecture on the history of this art, which has become such a powerful medium of self-expression through the work and influence, mainly, of Mr. Joseph Pennell. In dealing with the subject, and in my discourse on engraving ("Some Irish Engravers"), I desired to

[311]

show to our students that lithography, etching, mezzotint, etc.—arts in which Irishmen have excelled—are living and profitable arts to-day.

The valuable collection of plants made by the late R. P. Vowell was presented to the Museum by his widow.

Through the Clare Island Survey, commissioned by the Academy and largely carried out by members of our staff, a considerable addition to our collection has accrued.

Dr. Scherff has devoted much time to the heavy undertaking of the examination of the bones found by Mr. Usher in the caves of Doneraile.

Our purchases include a few Irish Volunteer relics, and Mr. Archer's splendid collection of medals and dies, also some fine lace, needle-point, Limerick, and crochet. We purchased some fine Irish church plate and other silver, including the very remarkable presentation basket given to Lancelot Sander by the Royal Dublin Society in 1772. The Society generously contributed one-third of the price when we secured this beautiful example of Irish skill. We also bought the organ-case of St. Bride's, an eighteenth century work, which shows the brilliant design and perfect craftsmanship of the Dublin workers of the time. This wood-carving by its delicacy and structural unity comes into competition with some of the finest examples of the Italian school. We also purchased some beautiful Italian embroideries.

In selecting textile objects we have kept in mind the desirability of setting good models before the workers in Ireland in connection with revived crafts. I regret to say that we have not been able yet to obtain for the Museum important and serviceable examples of tapestry and of illumination. These two arts are being revived in Ireland, and the main impediment to their development is the want of adequate means of educating the eyes and hands of the workers through the medium of first-class examples of foreign work.

During the year we have received two bequests of some importance: one from Mr. Woodhouse, of Omagh, including a few small works in bronze, and a large collection of serviceable books; the other, the memorable collection of musical instruments and books relating to music, made by Mr. R. B. Armstrong, of Edinburgh. The latter collection has not yet passed into our hands.

The principal work of the year in the Museum was the putting into place of the Georgian Room presented to us by the Governors of the Bank of Ireland. In this work we received the generous assistance of the Bank and of its Architect, and the structural difficulties were completely overcome by our staff. The room was restored in the Museum without the slightest injury to the delicate ceiling and the fine wall panels, and is now supplied with furniture approximately dating from the time of its construction, and mainly Irish.

We hope it may be possible to further illustrate periods of Irish history, and their social conditions, within the next few years.

Among the changes recently made I would mention the re-arrangement of the Water Colour room, formerly rather dark. Now, through the re-colouring of the walls, and the re-framing and rearrangement of the pictures, this collection is one of the most attractive in the Museum. I hope we may be able to further extend the collections of eighteenth century and the early nineteenth century works, showing the advance made by Irish painters in this art.

The exchange system, which I initiated with the Colonial Museums in particular, has already brought us some very valuable additions. From the Museum of Perth, Western Australia, we received our largest contribution, in exchange for a model of an Irish cross. I hope to extend greatly this system, which should not only establish close relations between the various Museums and ourselves, but should greatly enrich our collections with objects that are growing daily more scarce in the market.

The number of Circulation cases available for issue to Schools and

Classes has been increased to 332, including three cases of models illustrating varieties of apples. The number of issues during the year was 100, being an increase of 68 over that of the previous year.

We are indebted to Mr. T. J. Westropp for his kindness in adding to our collection of Irish architectural photographs, and for advice as to their arrangement; also to Mr. Lane Joynt for his continuous watchfulness over our Stamp Collections.

Owing to a public movement to honour the memory of George Petrie by a monument in the city, I brought together a collection of his drawings and writings, generously aided by the Royal Irish Academy and by friends and admirers of Petrie. Some of his spontaneous sketches exhibited his powers as a draftsman with a freedom and strength of which his more elaborate work gives one no idea.

In March I visited London, taking special note of the system of Museum Lectures in South Kensington and the British Museum, and I secured promises of important loans. I also had the advantage of seeing a large number of specialised private collections.

The sale of the Guides is satisfactory.

Of the Halfpenny Guide 4,812 copies have been sold during the year, and of various chapters or parts of chapters of the General Guide 3,105 copies.

New illustrated editions of the Guide to Metal-work, Part VI., Chapter V., Ironwork, and of Part V., Enamels, have been published during the year.

The Bulletin has been continued, the following is a list of the Papers which appeared during the year:—

- "Models of Animals." Dr. Scharff.
- "Irish Invertebrates." Mr. Halbert.
- "The Collection of Irish Minerals." Professor Cole.
- "Tabernacle Veil." Mr. Buckley.
- "German Engraved Glass." Mr. Westropp.
- "Egyptian Portraits." Mr. Stanton.
- "Irish Altar Plate," Part I. Mr. Buskley.
- "The Newton Loan Collection." Mr. Toppin.
- "Irish Silver Cake Basket." Mr. Westropp.
- "Models of Flowers." Miss Knowles.
- "Irish Invertebrates." Mr. Nichols.
- "Note on a Recently Discovered Food Vessel." Mr. Coffey.
- "Two Court Capboards." Mr. Toppin.
- "Irish Metals and Dies." Mr. Westropp.
- "History of the Science and Art Institution, Dublin," Second article. Mr. H. Banley White.

The following Lectures were delivered in the Museum during the course of the year:—

- Comdt G. N. Plunkett: "Lithography." Mr. W. R. Lane Joynt.
- "Interesting Varieties of the Stamps of the British Isles." Mr. J. B. S. MacIlwaine.
- "The British Coinage from James I. to Queen Anne, 1603-1714." Mr. M. S. D. Westropp.
- "Dublin Silver and its Marks." Mr. A. R. Nichols.
- "Irish Birds." Prof. T. Johnson.
- "A Piece of Timber." Mr. G. R. Stanton.
- "The Greek House." Mr. A. J. Toppin.
- "English Furniture." Mr. A. McGoogan.
- "Two Famous Dublin Medallions." Mr. E. C. R. Armstrong.
- "Arts of the Stone Age." Mr. J. J. Buckley.
- "The Art of the Tapestry Weaver." Comdt G. N. Plunkett.
- "Some Irish Engravers."

Having been elected President of the Museums Association for 1911-1912, and the Departments having agreed that the Museums Conference should be held in Dublin in 1912, on the 9th of July, I delivered the Inaugural Address, of which I give a few passages in an Appendix.

Delegates were present at the Conference from the British Museum (Bloomsbury), the British Museum (Natural History), the Victoria and

Albert Museum, the Museum of the Royal Botanic Gardens, Kew, the National Museum of Ireland, the National Gallery of Ireland, the National Museum of Wales, the Indian Museum, Calcutta, the American Museum of Natural History, and the Horniman Museum (London County Council), as well as from the Museums and Art Galleries of Aberdeen, Belfast, Bolton, Bootle, Brighton, Bristol, Burnley, Carlisle, Derby, Doncaster, Glasgow, Hastings, Hereford, Hull, Ipswich, Isle of Man, Leicester, Lincoln, Liverpool (Public Museum), Liverpool (Walker Art Gallery), Manchester (University Museum), Merthyr-Tydfil, Norwich, Plymouth, Reading, Rochdale, St. Helens, Salford, Sheffield (Museum and Art Gallery), Sheffield (Ruskin Museum), Stockport, Stoke-on-Trent, Sunderland, Swansea, Warrington, Whitechapel, Worcester and Worthing.

The Association received a gracious and hearty welcome from Mr. T. P. Gill on behalf of the Department of Agriculture and Technical Instruction for Ireland, and from the Lord Mayor (the Right Hon. Lorcan G. Sherlock, LL.D.) on behalf of the City of Dublin.

The special subject chosen for the conference was "The Relation of Museums to Education," and a large percentage of the papers treated of some aspect of this question.

The Rev. Prof. Henry Browne, M.A. (Professor of Greek, University College, Dublin), read the first paper, taking for his subject "The Influence of Museums on the Reform of Classical Studies."

The following Papers were also read:—

- "The School Work of some American Museums." Dr. F. A. Lucas (Director, American Museum of Natural History, New York).
- "Old and New Classifications of the Stone Age." Reginald Smith, B.A., F.S.A. (British Museum).
- "Collecting Large Series of Birds and Preserving and Housing their Skins in the Museum." Professor C. J. Patten, M.A., Sc.D. (Professor of Anatomy, Sheffield University).
- "A new Method of Exhibiting Geological Specimens in Wall Cases." Prof. H. J. Seymour, B.Sc. (Professor of Geology, University College, Dublin).
- "The Relation of Schools of Art to Museums." James Ward, A.R.C.A. (Head Master, Metropolitan School of Art, Dublin).
- "The Necessity for Æsthetic Harmony between Museums or Galleries and their Contents." Sir Walter Armstrong (Director, National Gallery of Ireland).
- "Art and the Child." Percy Bate (Aberdeen Art Gallery).
- "The Organisation of Exhibitions in England of Foreign Art." H. D. Roberts (Director, Public Library, Museum, and Fine Art Galleries, Brighton).
- "The Care of Paintings, Drawings, Engravings, and other Art Treasures." E. Rambault Dibden (Curator, Walker Art Gallery, Liverpool).
- "Greek Sculpture: Some Notes on Collecting and Exhibiting Plaster Reproductions." B. H. Mullen, M.A. (Curator, Royal Museum and Art Galleries, Peel Park, Salford).
- "Museum Guides: Real and Ideal." Thomas Sheppard, F.G.S., F.S.A. (Scot.) (Curator, Municipal Museum, Hull).
- "The Bird Collection in the National Museum, Dublin." A. R. Nichols, M.A., M.B.I.A. (National Museum, Dublin).
- "The Artist and the Gallery." Dermot O'Brien (President, Royal Hibernian Academy).
- "Some Results of the Dry Sand Process for Cleaning Bones." R. F. Scherff, Ph.D., B.Sc. (Keeper, Natural History Division, National Museum, Dublin).
- Public Lecture on "Museums: Interesting and Otherwise." William Evans Hoyle, M.A., D.Sc. (Director of National Museum of Wales).

Two of these papers were read in the theatre of the Royal Dublin

Society, by the Council's kind permission. The other addresses were delivered in the Museum Theatre. Many of the delegates visited Glendalough, New Grange, Monasterboice and Mellifont, for the study of our ancient remains.

I append the reports from the hands of the various Divisions and Sections, as well as the returns of attendance and lists of acquisitions and loans.

G. N. COUNT PLUNKETT,
Director.

April, 1913.

APPENDIX I

EXTRACTS FROM THE INAUGURAL ADDRESS DELIVERED BY G. N. COUNT PLUNKETT BEFORE THE MUSEUM CONFERENCE.

When the Association met in Dublin before [in 1894] it was under the direction of one of the most beloved citizens of Dublin, the late Dr. Valentine Hall, whose great ability, brilliancy, and learning made him so well known to the world, and whose gifts have been held by his friends only secondary to the heartiness of his character. I am glad to see here to-day some who were present at that previous meeting, and who will remember him as their friend, and I desire in our present meeting to carry on the genial traditions of the past.

In the vivacious Address which my predecessor, Mr. Plimsom, delivered last year, he kept in view the aims of those who have the direction of Museums, speaking as a Curator to Curators. In this he was quite right; yet I am disposed to dispense with such a usage, and to speak from this platform beyond you to the outside public. We have a large body of sympathisers outside. The Museum system of education has come to stay. In their beginnings, Museums had many difficulties to face, but finally they won their place in public opinion through the success of popular education, and now the Museum is sheltered under the wings of that Minerva. No community, however small and insignificant, considers itself properly provided for unless it has a Museum. To my mind a Museum is more than a system; it is a part of the national life, it is an expression of the national life and of the higher qualities of the people to whom it belongs. It is something which locally has struck its roots, and we may expect from it such flowers and fruit as belong to the nature of the place. When we remember that all systems of education are mere expressions of humanity, that science is simply an attempt to master the difficulties of knowledge, that these things are all personal and individual, though they may be diffused in another sense through the whole community—as we look at the matter from this point of view, we must regard the Museum as a means of expressing and conveying knowledge. So the Museum has its place beside the Library, and its place in the world's work, and it is insistent in helping that work. For example, we know something of the difficulties of a young artist; he may have a knowledge of the arts of composition, drawing and colouring, his figures may be properly proportioned and he may know something of perspective, but when he has finished a particular work he is disconcerted to find that it has no cohesion, that the details of his work, however good in themselves, have apparently no relation to each other. What is commonly the result of this discovery? He goes to the public Art Gallery and there sees how the great masters have struggled with the same difficulties, and have conquered them. Of course this is true of nearly all studies. Every craftsman has such troubles from the moment he puts his hand to his task. In our Museum we have particular collections brought together mainly in relation to industries established in Ireland. We have found that one of the great troubles in connection with craftsmen-

ship is that the working man is liable to be influenced by the vulgarities which survive in our time, principally from the Victoria era. But this is not his fault; and as an old writer has said, "If you want to rid a man of bad projects put good projects before him," therefore we have selected a large number of examples of the best work of the past, in silver-smithing and like arts, and these are the daily study of our working man.

One of our national misfortunes has been the loss of tradition in our arts. To show the craftsman the best examples of the best work is not merely a stimulant to good imitation in his work, for it produces that incentive to imagination which is valuable to the worker and needful for the best cohesive work.

Besides the call for the cultivation of tradition in a Museum, there are urgent reasons why the Curator should keep a keen outlook on mankind. We need to be reminded that the world is always recommencing, and that wonder and admiration are born anew every day, and the facts and the previous fancies of life are submitted daily to the investigation of fresh speculative minds, and to senses quickened by the novelty of experience. These conditions require that the relation of public institutions to life should be acute and intimate, that our institutions should be concerned with all such re-commencements. Some people will question the universal rule regarding these fresh beginnings. "What about the settled facts of Science?" they may ask. I should be glad to know what facts in Science are settled. Because certain things have been postulated for the convenience of students, it has been assumed that they were actual facts, and every day the casual reader mistakes ideas for inalterable conclusions. Science is constantly finding that it has to shift its basis, so that if a man is to gain knowledge he must begin at the foot of the ladder. I need not dwell on this aspect of the use of Museums, but I would emphasise the fact that many of the problems of humanity which were supposed to have been solved a few years ago, such as the question of the Descent of Man, have been opened for re-investigation by every fresh discovery. It is for the good of mankind that such ones of proof is thrown upon generation after generation of students, and in such studies the Museum gives service which the least imaginative must respect.

We live in a hurried age, when men are anxious to secure by unlabourious methods the results of past thought and effort. To-day the term "culture" has come to mean a familiarity with material success in the arts and literature, and even in science, rather than a recognition of the mental processes which lead to this success. In the competition of trade, the workman looks for some convenient standard by which to guide his hand. However we may quarrel with such an almost mechanical acquisition of rules, we owe to it the regularity, and much of the ease, of our lives, and the graciousness that has come to be associated with the forms of common things.

The Museum cannot displace the class-room; but it can assist in the acquisition of knowledge, and the correction of errors to which the unaided reader is sometimes prone. Verbal training occasionally tends to overlay individuality in the student. But, whatever the reason, the examination of an object in art or nature is almost invariably an incentive to originality. Mr. Gill has indicated the manner in which our Irish Museum comes to the assistance of the Professor of Agriculture and the teacher of the provincial Technical School, so that besides dealing with speculative questions our work has close relation to the struggle for life. I look forward to a great extension of our work, and I hope that in the future the Museum will be made as much a part of education as the class-room. Of course this implies that some of the collections must be collated, so to speak, with the curricula of education. That, however, is a matter of understanding between those who have charge of Museums and the educational bodies.

Before closing my address I would like to say a word on a point which affects all Museum Curators in these countries. There are many collectors

who, taking what might seem a narrow view, accumulate illustration after illustration of a particular craft or a particular phase of history. Sometimes a collector will bring together with much pains and at great expense objects that have no place in life and no individual attraction to justify their retention in a private dwelling. Now it has been sometimes said, rather cynically, that the public gains from the weakness of humanity. It is beyond question that the life-long devotion to such acquisition by people who have the flair for acquiring, is, in the long run, of great public service. Within the past few years, however, the commercial value of many things of little beauty but of historic interest has enormously increased. Seeing that so many of our Museums are not very rich in this world's goods, I would ask on behalf of the Museum Curator that those who have collections of the quality of which I speak should put them generously at the disposal of the Museum.

Owing to the fact that the impediments to the free admission of precious things into America have been, to all intents and purposes, removed, we are now in face of a world-wide competition for such things. If the possessor of such collections does not choose to give, at least he can lend, and by this means make the people part owners of his treasures.

In Ireland the Curator is face to face with many problems. It is his business to help the rising industrial movement as far as possible, and we hope to add a purely industrial Annex to our own Museum. Then the historical difficulty has to be dealt with. The conflict of races, and sometimes the haste for new ideas, have caused at times a wholesale destruction of ancient things. We are fortunate in having the greatest collection of Celtic antiquities in Europe. We have many beautiful objects of the La Tène period showing the intimate relations between the work of Ireland at that time, and the Celtic work executed in England during the Roman occupation. We have a long range of objects of exquisite craftsmanship in metals and in stone which establish Ireland's place in the history of Christian art. The historic value of these things cannot be over-estimated, for until the Irish collection was arranged and largely developed much of our ancient history was treated by sceptics as purely mythical. Our old romances are full of beautiful details regarding the costume, weapons, and ornaments of such periods, for example, as the beginning of the Christian era. If to-day you take up the *Yvra de Cusigne* (the Cattle Raid of Cooley), which you can read in the noble English of Mrs. Hutton, and walk with the book into the Department of Irish Antiquities, you will at once recognise that in the book, as in the collection, you are brought face to face with the actual past.

But if we have so many things that are ancient, we have very little indeed that can be called modern.

There is a long period during the occupation of Ireland by the English, which is hardly represented at all. We have works of extraordinary beauty extending down as far as the thirteenth century, but then occurs this gap which we have hitherto been unable to fill. After our Irish Romanesque Architecture came the Gothic, and Ireland is strewn with splendid evidence of the arts of peace and war in her churches and innumerable castles. But these stand almost alone as evidence of some ages of the national life. Well, history is no longer looked upon as a mere record of dynasties and wars and changes. What we now want to know is, how the people lived, what were their joys and sorrows, what their convictions, what the things that made for the representation of the human soul; and these are the things that we hope to bring together in the Museum, so that our people may be in a position to realise vividly the elements of their own past.

The vote of thanks (says the *Museum Journal*) having been unanimously adopted, the President, in reply, expressed his appreciation of the honour done him by electing him President. It was a matter of great satisfaction to the Museum staff that the Association had consented to come to Dublin. The reference made to the old Irish Museum was

[317]

particularly interesting to him, from the fact that it was the first attempt made in Ireland to apply science to industry. The Museum had then a series of brilliant men at its head, beginning with Sir Robert Kane and ending with Dr. W. K. Sullivan. The scheme which they attempted to carry out had very naturally devolved upon other bodies. They collected illustrations of the raw materials of Irish industries, and these things had turned out to be of extraordinary value and importance in connection with the development of the Department of Agriculture. The Dublin Museum inherited, not only these things brought together sixty years ago, but also the Royal Dublin Society's Museum and certain objects which had been transferred to the Royal Irish Academy by the Irish Parliament; so that the collections reached back, probably, as far as 130 or 150 years.

APPENDIX II.

RETURN SHOWING NUMBERS OF VISITORS TO THE NATIONAL MUSEUM OF SCIENCE AND ART.

Months.	Totals. 1911-1912	Week-days. 1912-13.		Sundays.	Totals. 1912-1913.
		Mornings.	Evenings.		
April, . . .	23,565	19,831	898	2,848	22,827
May, . . .	21,539	21,624	589	2,014	24,237
June, . . .	22,883	17,629	557	2,356	20,442
July, . . .	25,379	23,623	845	1,982	26,409
August, . . .	30,994	28,889	1,363	2,459	32,691
September, . .	23,131	18,714	616	2,537	21,867
October, . . .	22,389	19,002	676	2,469	22,147
November, . . .	21,727	18,086	579	1,942	20,607
December, . . .	22,530	19,864	781	2,754	23,379
January, . . .	22,167	20,049	597	2,159	22,785
February, . . .	19,644	17,709	992	2,362	21,063
March, . . .	22,589	22,528	1,672	2,632	26,832
	278,477	247,268	10,205	27,654	285,127

APPENDIX III.

REPORT OF THE KEEPER OF THE IRISH ANTIQUITIES DIVISION.

During the period from 1st April, 1912, to the 31st March, 1913, one hundred and sixty-eight objects have been registered, a few of these had been in the collection for some time. One hundred and thirty-six were deposited by the Royal Irish Academy and twenty-six were acquired by direct purchase. Among the objects deposited by the Academy were the bronze rapier (the largest found in Western Europe) discovered many years ago at Lisane, Co. Derry, and purchased from the Hon. Mrs. John Henniker Horton, several stone and bronze antiquities presented by Mr. Thomas Plunkett, M.R.I.A., an interesting find of six copper cells found at Cuppen, Co. Cork, presented by Mr. Robert Day, M.R.I.A., a very fine spear-head of rare type, and two leaf-shaped swords found together at Tempo, Co. Fermanagh, also two very fine bronze spear-heads found at Belterbet, Co. Cavan. Mr. W. J. Knowles presented an interesting series of stone cells, etc., from Glen Ballymore.

Co. Antrim, and Dr. Neil Gordon Munro presented a further collection of prehistoric Japanese implements and pottery from dolmens and early sites, while Mr H. E. Seton Karr sent a donation of palaeolithic implements from India.

The Academy's fine collection of Irish medals has been arranged and labelled, and is now available for study. Three table cases from Room IV. have been removed, and are being re-arranged and re-fitted for exhibition. They will contain early seal-matrices, rings and some miscellaneous objects.

The new purchases of bronze implements, etc., have been labelled and placed on exhibition in Room No. III. The visit of the Museum Association in the Summer necessitated the re-fitting of various cases in Room No. III. Various stone celts added to the collection during the year have been placed on exhibition in Room No. II.

Mr. E. C. R. Armstrong, (who with Professor R. A. S. Macalister, represented the Royal Irish Academy,) was allowed to attend the Prehistoric Congress of Archaeology and Anthropology held in September, 1912, at Geneva. Hopes were expressed by a leading member of the Congress that it might be possible to arrange a future meeting in Dublin.

GEORGE COFFEY, Keeper.

APPENDIX IV.

REPORT OF THE KEEPER OF THE ART AND INDUSTRIAL DIVISION.

The work of this Section has gone on steadily during the past year, having been interrupted only by the preparations for the reception of the members of the Museum Association in July. This event involved a good deal of work, which was undertaken by the staff of the Art and Industrial Section, and much satisfaction with the arrangements was expressed by the members on their departure from Dublin.

The acquiring every year of several hundred specimens for each of which a position has to be found in the exhibition rooms and galleries of the Museum, was bound eventually to create a very difficult problem—that of providing space for new acquisitions. There were 1,871 objects registered in 1909; 438 in 1910; 579 in 1911, and 575 in 1912. These figures do not include postage stamps, books or photographs.

The collection of Illuminated Manuscripts received on loan from the Victoria and Albert Museum in June was returned in September. Students of the Metropolitan School of Art, and others, copied several of the illuminated pages, and the collection generally was studied with great interest by a large body of visitors.

In October, through the kindness of the Senefelder Club, we obtained on loan a small but very instructive collection of Modern Lithographs. There are some thirty examples, specially selected to show the excellence reached in the recent revival of this very interesting side of fine art. Charles Shannon, Joseph Pennell, A. S. Hartick, Harry Becker, A. Belleroche, and Daniel A. Wehrschnidt are some of the artists represented.

An interesting loan collection of water-colours, ink and pencil drawings, and printed publications, illustrating the work of George Pettie, LL.D., has been arranged in the Central Court. The following have kindly contributed:—Count Plunkett, the Council of the Royal Irish Academy, Miss Collis, Mrs. Hutton, Mr. P. J. O'Reilly, Mr. W. Pigot, Mr. Andrew Robinson, and Mr. H. J. Stokes.

TRAVELLING.—In July I went to London and visited the exhibition of objects brought home from the previous winter's excavations at Turkhun by Professor Vladimir Petrie, and arranged in one of the large rooms at University College, Gower Street. Two of Professor Petrie's Assistants, Messrs. Englebach and Wenwright, kindly went through the collections with me, and a good number of very interesting remains were allocated to our collections. A visit to the Egypt Exploration Fund Exhibition

at King's College also had profitable results for our collections. There the objects found in the excavations at Abydos were shown. They were not so numerous as those of Professor Petrie, yet the committee of distribution sent us some very interesting pieces.

I visited also the Exhibition of Students' Works at South Kensington, and several of the permanent public art collections.

In March I went to Paris, and visited the following institutions :—The Musée des Arts Décoratifs, The Louvre, the Carnavalet, the Gobelins Tapestry Manufactory.

Mr. Toppin also went to Paris in March, and whilst there, we visited together several dealers' shops for the purpose of pricing some early tapestries. We also inspected some collections of Chinese porcelain with a view to getting a few pieces to fill more obvious gaps in our Museum series before the new catalogue and guide is begun.

In July Mr. Westropp went to Cork to see a private collection; in August, to Kilmallock, to see an old mantlepiece; in December he accompanied me to Ormeau, to see the Woodhouse collection; and in March he went to London to visit some of the public collections.

MUSEUM LECTURES.—All the members of the staff in this Section participated in the work of preparing lectures for the course which began in January. Two outside specialists also contributed. Particulars are given elsewhere.

LANTERN-SLIDE COLLECTION.—To the institution of the courses of winter lectures is due another useful development of our work, namely, the formation of a collection of lantern slides illustrating the various classes of exhibits in the Museum. We have now over five hundred slides, dealing with art, art crafts and archaeology, which are available for lending to art classes, etc. Several institutions have already drawn from them for lectures.

ART STUDENTS.—During the summer course at the Metropolitan School of Art in July, a number of students visited the Museum and made drawings from objects, including the lace and embroidery collections. Some of those made by the students from Derry, obtained distinctions at the National Art competitions, South Kensington. Details in the work done in the Museum by these and other art students have not been recorded, but it is proposed to have at the entrance a book in which they will enter their names every day they visit the Museum for study.

OBITUARY.—The announcement of the death of Mr. Robert Bruce Armstrong, F.S.A., of Edinburgh, in January, was received with much regret. He had for very many years taken a practical interest in this Museum, having from time to time contributed a number of interesting and valuable specimens. About two years ago he intimated to us his intention of bequeathing his fine collection of English and Irish stringed instruments, a Boss mantlepiece from a Dublin house, and other objects. These, we have been informed by his executors' Solicitors, will be very soon ready to be handed over to us. On several occasions he expressed approval of the attention we had been giving to the development of the Musical Instrument Collection, and to its proper display; and to these circumstances, no doubt, are due his having marked out our Museum as the recipient of his collection. The instruments forming the bequest are figured and described in the two handsome volumes published by him a few years ago, *The Irish and Highland Harps and English and Irish Instruments*.

GREEK AND ROMAN COLLECTIONS.—A re-arrangement of the free standing cases enables the coins and vases to be more conveniently studied. The additions are a votive altar of stone, with an inscribed Greek inscription, an early Cypriote jar with scratched geometrical ornament, and some casts of Mycenaean sculpture. These last are of great interest, illustrating as they do the earliest European civilisation.

EGYPTIAN COLLECTION.—Some of the larger plaster casts having been

removed to the Central Court, room has been made for several cases, in which have been arranged a good many of the smaller objects that have been accumulating for some years. Both the Egypt Exploration Fund and the British School of Archaeology in Egypt have contributed to the collection this year, the former having given a number of objects from Abydos, and the latter some early stone jars, a fourth dynasty coffin, fragments of an earlier one, fragments of a bed, and some pottery and basket-work from a predynastic cemetery at Tarkhan.

ETHNOGRAPHICAL COLLECTIONS.—A good deal of re-arrangement has been carried out this year. The North and South American objects have all been transferred to the new wall case. This has allowed of a better grouping of the South Pacific collections, and the expansion of some of the more crowded cases, especially that from New Zealand. The re-arrangement of the African collection is in progress, part of it having been placed in the new wall-case. The additions include some weapons from the Kavirondo district, given by Mr. E. S. Grennan, a large and varied collection from Nigeria, given by Mr. J. W. Boardman-Milligan, and a small collection from the New Hebrides by Commander Wilson.

It is hoped that this year the two wood-framed wall-cases at the end of the room will be replaced by larger cases with steel frames similar in pattern to that recently fitted up along the east wall, and a little more exhibiting space be thus added to this very compacted section of the Museum.

INDIA AND PERSIAN COLLECTIONS.—No additions and no alterations have been made here.

ARCHITECTURAL SCULPTURE, ETC.—No additions and no alterations have been made here.

MUSICAL INSTRUMENTS.—The addition of two instruments, examples of the work of two Irish violin makers not hitherto represented in the collection, is to be recorded. These are very good specimens of the work of Delaney and of Macintosh. An eighteenth century hurdy-gurdy, or vielle, made, curious to relate, by a Coleraine maker, J. Qlig, has been obtained. The harp so long on loan in the Museum from Mr. Brady, and formerly the property of Professor Glover, who stated that it originally belonged to Lady Charlemont, the wife of the great Earl of Charlemont, has been purchased for the collection. To the bagpipes have been added a very good Irish union set, and a modern small Highland set by Glen of Edinburgh. A copy, in splendid condition, of the very rare tutor for the Irish pipes, by O'Farrell, has also been secured.

FURNITURE COLLECTIONS.—The Georgian Room, the gift of the Directors of the Bank of Ireland, referred to in last year's report, has been erected at the south end of the Annex, and partially furnished in the style of the period. Other examples of Dublin Georgian interior work have been brought together near the room, including the very beautiful carved wood doorway from Whalley's house (more recently the Catholic University House) in Stephen's Green; staircase balustrading from Sweetman's house in Francis Street; etc. Near it will be erected also the beautiful carved wood organ case from old St. Bride's Church (demolished during the clearances around Bride Street some years ago).

Other additions this year include a mirror with cut glass border probably Waterford or Cork make, eighteenth century; a firegrate with engraved brass face, by Clarke, Dublin, late eighteenth century; an early eighteenth century chair, English, and a fan bellows, Irish.

The platform in Room VIII. G, have been re-constructed and enlarged and covered with linoleum, the result being a very noticeable improvement in the appearance of the room. It is intended to fit up along the west wall several of the cases removed from the Ethnographical Room.

The continental furniture was partially re-arranged this year, allowing of the exhibition of the handsome mahogany armchair lent by Miss Gleason. This interesting piece was offered for sale to the Museum, but owing to lack of funds it could not be acquired.

The valuable tapestry hanging, the property of the late Lady Leyard exhibited for several years in Room IX. G., has been recalled by her executors and sold in London. A good piece of old tapestry is a great desideratum for the Museum, in view of the possibility of successfully promoting the manufacture of this fabric in Ireland.

REPOUSSIÉ.—About a dozen additions have been made to these collections, including a gold ring of Cork eighteenth century manufacture, a curious old spy glass and scent bottle, some Russian peasant jewellery, an Italian ceremonial key, and a Spanish rosary.

COSTUME.—Two lady's dresses and two embroidered waistcoats of the eighteenth century have been added to the civil costume. With the military costume have been exhibited several Volunteer breastplates and tunic buttons, also a very interesting flag of the MountainBlick Volunteers purchased from a London dealer.

COINS AND MEDALS.—Last year the additions to the coin collection were very numerous, totalling four hundred and fifty-four. This year they number but twenty-five, the more notable being a five-guinea piece of Queen Anne, a crown of Charles II., a half-crown of James I., and another of Charles I., and a rare proof halfpenny of James II. (Irish). The purchases are now confined to British coins, and we are steadily working towards a full series.

The number of medals acquired is very large—almost altogether Irish, and many by the noted medallists, the Mosseys, Woodhouse, Jones and Parker. We were fortunate in securing those belonging to a well-known Dublin collector, Mr. Robert Archer, the result of more than twenty-five years collecting. There are extremely few Irish medals not now represented in the Museum. In addition to the medals from Mr. Archer's collection, we secured his collection of steel dies used in striking many of the medals—they number upwards of forty.

ARMS AND ARMOUR.—These collections remain as they were last year the only addition being an interesting short sword by Road of Dublin.

CARVED IVORIES.—For exhibition with this collection has been acquired a water-colour drawing of a very valuable piece in the Pierpont Morgan collection, a Madonna and Child of carved ivory, coloured and gilt—French work of the fourteenth century.

CERAMICS AND GLASS.—The re-arrangement of the Chinese porcelain and the English pottery and porcelain is still in progress.

The additions include some examples of modern Dublin and Cork pottery; several pieces of English porcelain—one a rare inscribed mug of early Lowestoft manufacture; four curious pieces of Chinese stone-ware—architectural ornaments of the Ming period.

To the glass have been added about a dozen good examples of Irish make, a few pieces of English glass, two interesting German pieces, and one Venetian.

CHINESE AND BURMESE COLLECTIONS.—The Chinese objects have been removed to Room IV. G. where they are exhibited with the Indian collection. Their place has been filled by transferring some Chinese objects from the Ethnographical Room. The new acquisitions consist of two pieces of Chinese costume.

EMBROIDERIES AND TEXTILES.—A few instructive pieces of embroidery have been acquired, notably a Sicilian christening cloth of silk, very richly worked with flowers in coloured silks, and an eighteenth century Irish embroidered linen bedspread. Some specimens of continental—Russian, German, etc., needlework have also been purchased. A very beautiful embroidered bedspread of seventeenth century English work has been lent by Mrs. Danne-Langworth.

WATER-COLOR DRAWINGS.—The rehanging, and the partial reframing, thereby necessitated, of the valuable little collection of water-colours transferred from the Royal Dublin Society in 1878 have been completed

The Board of Works kindly undertook, at comparatively short notice, to paint the walls and woodwork of Passage Rooms I. and II. in colour suitable as a background for the pictures, and the result of the whole rearrangement is quite satisfactory. The main portion has been hung in Room II., and, to make room for the remainder, the collection of portraits of men of science has been removed from the end wall of Room I.

ARCHITECTURAL PHOTOGRAPHS.—Mr. T. J. Westropp's collection of photographs of Irish architectural remains has been arranged in a draw-out cabinet alongside the other cabinets of architectural photographs in Room I. The arrangement was carried out with the advice of Mr. Westropp himself, who continues to lend us his negatives for the purpose of making enlargements from them. The surplus prints, suitably mounted on cardboard mounts, will be stored in drawers under the cabinet, and will be available, on request, for students.

PHOTOGRAPHY EXHIBIT.—A few daguerreotypes and glass positives have been added to this collection, which has been attracting some attention from visitors.

MINIATURES.—Four painted miniatures and four interesting albumen portraits have been added. The former include a portrait of Lord Edward Fitzgerald.

LACE.—Several valuable examples of needlepoint lace have been purchased, including a very beautiful apron worked at the Presentation Convent, Youghal, in 1832, and an equally beautiful handkerchief worked there last year and exhibited at the Royal Dublin Society's Art Industries Exhibition at Ball's Bridge. Other examples of Irish needlework added are a bolero and a border of crochet worked at Tralee, a Carmichael's appliqué and guipure collar worked at St. Louis' Convent, a Limerick "run" lace fichu, a barthe of drawn and embroidered muslin, and a baby's dress garnished with white embroidery. There have been complaints that the number of specimens of old Irish lace in the collection is so small. It is, therefore, necessary to state that this is not the result of neglect on the part of the Museum staff. From time to time examples of old Irish needlework have been offered to the Museum for purchase, but in almost every instance they have had to be rejected on account of their very poor design. No doubt in time we shall have a fair number of representative examples of Irish needlework. In view of the extent of the lace industry in Ireland the importance of securing as many good examples as possible for workers has been realised by us for many years. Of continental needlepoint the most important addition is a pair of eighteenth century lapsets of extremely fine work.

A few pieces of fine bobbin-made lace have also been purchased. In this connection it may not be out of place to express regret that in Ireland no movement has been set on foot for the revival of bobbin lace manufacture, corresponding with that which was begun in England a few years ago. In this Museum is a rich store of examples of bobbin-made lace which would be of very great help as examples for workers.

POSTAGE STAMPS.—The postage stamp collection has received attention this year again from Mr. Lane Joynt, who kindly gives most valuable advice as to its development, notifying us as to the new issues we ought to acquire. The additions number 1,446 this year, mostly received from the following governments, to whom we wrote asking for gifts of their new issues:—France, Argentina, Zanzibar, India, Mexico, Dominica, Germany, Seychelles, St. Helena, Newfoundland, New Zealand, Northern Nigeria, Egypt, Holland, Denmark, Roumania, Spain, Switzerland, Cyprus, Sudan, Trinidad, Italy, Antigua, St. Kitt's.

This collection attracts a considerable number of visitors to the Museum each year—its chief value to them consisting in the fact that it is kept up to date, a feature absent even from the British Museum collection.

METALWORK COLLECTIONS.—To the bronzes have been added two

interesting pieces, namely, a fifteenth century Gothic cross, originally gilt, probably of Irish workmanship, and a German mortar (for grinding), dated 1706.

To the silver have been added four important pieces of Irish altar plate, namely, a silver gilt chalice dated 1897, another, not actually bearing a date, but certainly of about 1640, a monstrance, also gilt, dated 1742, and an undated chalice of the seventeenth century. Another piece of silver of great importance and of beautiful workmanship is a cake-basket given as a premium by the Dublin Society to one Laurence Sanders in 1772 for reclaiming bog in Queen's County. For this piece we have to acknowledge our indebtedness to the Council of the Royal Dublin Society, who, when it was offered to us for sale, generously agreed to participate in its purchase for the National Collection.

ILLUMINATIVE ART.—A beautiful and instructive page of modern work has been acquired.

MISCELLANEOUS.—The handsome carved wood organ-case, previously mentioned, formerly in St. Bride's Church, Bride Street, Dublin, pulled down about fifteen years ago, has been purchased. It is of Dublin workmanship of the first or second decade of the eighteenth century. It was first proposed to erect it on the Main Gallery, but it is now intended to place it near the Apollo Room in the Annex. The work of setting it up will be undertaken this year.

Other purchases include the mantelpiece for the Apollo Room. It was originally in this room, but had been removed before the Bank of Ireland took over the house. It is due to Mr. Hicks, the vendor, to say that, at our request, he did not push the sale of it pending our negotiations about the acquisition of the room. We were thus enabled to get the complete room, which is acknowledged to be one of the most interesting acquisitions the Museum has made for some years.

An interesting pair of carved and gilt wood candle brackets, late eighteenth century, was obtained for the Apollo Room.

MUSEUM LIBRARY.—Thirty-six volumes, besides periodicals, have been purchased for the Library.

LOANS TO METROPOLITAN SCHOOL OF ART:—

Prints, drawings, photographs, etc.:

Eight water-colour drawings.

Thirteen portfolios of reproductions of prints in the British Museum.

Twenty-one frames of architectural photographs.

Textiles, lace, etc.:

Six frames of lace specimens.

Guaze tunic.

Pottery, etc.:

Hindoo screen.

Five tiles.

Leather work:

One case.

Furniture:

Chippendale chair.

CIRCULATION COLLECTIONS.—There were 700 issues during the past year. Three new cases were prepared, making a total of 332.

The lists (a) of *Chief Acquisitions*, (b) *Donations*, and (c) *Loans*, are appended.

J. J. BUCKLEY, *Keeper.*

(a) PURCHASES.

Silver:

- Chalice, silver gilt, Irish, dated 1597.
- Chalice, silver gilt, Irish, c. 1640.
- Chalice, silver gilt, Irish, middle of seventeenth century.
- Monstrance, silver gilt, Irish dated, 1742.
- Cake basket, silver, Dublin, 1772.
- Spoon, silver, Dublin, 1767.
- Pair of shoe buckles, silver, Dublin, 1788.
- Spoon, Dublin, c., 1797.
- Chalice, Irish, eighteenth century.
- Shoe buckle, Dublin, c. 1890.

Pottery and Porcelain:

- Blue jasper plaque "Ganymede and the Eagle," Wedgwood, eighteenth century.
- Bowl, enamelled earthenware, Dublin (?), dated 1752.
- Mug and plate, Lowestoft porcelain, eighteenth century (former inscribed "A Trifle from Lowestoft").
- Dish, Worcester porcelain (1751-1783).
- Dish, Chinese porcelain (*famille verte*).
- Four grotesque figures, Chinese stoneware (Ming dynasty).

Glass:

- Vase (from Trapnell Collection) and bowl, white Bristol glass, late eighteenth century.
- Oval dish, English cut glass, early nineteenth century.
- Several pieces of Irish cut glass, including an oval dish and stand, early nineteenth century; a pair of water jugs, Cork or Waterford, late eighteenth century (from Drew Collection); and a scent bottle inscribed "Waterford, 1794."

Lace, Embroidery and Costume:

- A collection of specimens of needlepoint and bobbin-made lace, including a fine pair of Argentea lappets, a Milanese engorgente, an apron, and a handkerchief of fine Youghal point, and a seventeenth-century Sicilian christening coverlet.
- A collection of Russian peasant costumes, embroideries, etc.
- Lady's dress, brocaded silk, English, eighteenth century.
- Waistcoat, figured silk, eighteenth century.
- Several pieces of lace (Irish and Continental), also an embroidered bedspread, Irish, last half of the eighteenth century, and an embroidered robe, Chinese.

Irish Volunteer Relics:

- A silk flag of the Mountmellick Volunteers, c. 1789.
- Silver belt plate of the County Dublin Light Dragoons, 1779.
- Brass belt plate of the Shillelagh Infantry, c. 1800.
- Brass belt plate of the Armed Association, 1793.

Furniture:

- Mahogany chair, chippendale, 1710-15.
- Pair of gilt carved wood scones.

Coins and Medals:

- Several coins and medals, the latter including:—
- Silver medal commemorating the defeat of the French at Bantry Bay, 1797 (by Wm. Mossop, sculp.).
- Silver medal, Westmeath Grand Jury to the Wicklow Regiment, 1797 (by Wm. Mossop, sculp.).
- Silver medal, David Latouche, late eighteenth century (by Wm. Mossop, sculp.).
- Collection of English war medals (1840 to present day).
- Silver medal of Tulkamee School, late eighteenth century.
- Silver medal of Trinity College Debating Society, 1795.
- Collection of 196 medals relating to Ireland, chiefly by Irish medallists, and a collection of 42 steel dies from which some of the medals were struck.

[325]

Musical Instruments:

- Irish harp, last half of eighteenth century.
- Viola, by Delaney, Dublin, early nineteenth century.
- Set of Irish bagpipes.
- O'Farrell's Tutor for the Union Pipes, c. 1800.
- Viola and bow by Macintosh, Dublin, early nineteenth century (1).
- Hurdy-gurdy by J. Quig, Coleraine, eighteenth-century.

Miscellaneous:

- Carved wood organ case from St. Bride's Church, Dublin, c. 1730.
- Marble mantelpiece belonging to the eighteenth century Dublin room recently presented to the Museum.
- Bronze fireproof safe, Dublin work, eighteenth century.
- Mahogany plate basket, Irish, eighteenth century.
- Bronze pestle and mortar, German, dated 1795.
- Collection of Egyptian antiquities from Tarkhan.
- Collection of amulets and charms of foreign countries.
- Bronze processional cross, Irish, fifteenth century.
- Several casts, including some of (a) Mycenaean architecture (b) Roman British monuments; (c) Medieval sculpture.

(b) DONATIONS.

Mrs E. Anderson—

- Two pieces of modern Irish crochet.

R. B. Armstrong, Esq.—

- Photograph of harp on monument in Jerpoint Abbey.

David M. Bell, Esq.—

- Mahogany embroidery frame.

J. A. Benson, Esq.—

- Six engraved pewter plates for music.
- Violin parts made by Perry, Dublin.

Trustees of the British Museum—

- Portfolio: Reproductions of prints.

British School of Archaeology in Egypt—

- Collection of antiquities from Tarkhan.

Brooklyn Museum—

- Catalogue of the Avery Collection of Chinese cloisonné.

Col. F. W. N. Wogan-Browne—

- Two mummied hands and painted linen.

J. J. Buckley, Esq.—

- Catalogue of the Art Loan Exhibition, Dublin, 1886.

Mrs. Cologan—

- Bronze Buddha.

H. S. Crawford, Esq.—

- Japanese head-dress of batik cloth.

Miss Day—

- Anklets and bracelets from Assamghur.

Chief Commissioner, Dublin Metropolitan Police—

- Two medals, Visit of King George V., 1911.

Egypt Exploration Fund—

- Collection of antiquities from Abydos.

Colonel Leslie Ellis—

- Two Anglo-Hanoverian silver coins.

Major Walter Fisherbert—

- Chaco and forage cap, 71st Highlanders.
- Deputy Lieutenant's hat.

J. Fitzmaurice, Esq.—

- Button, 64th Regiment.

Mrs. Fox—

- Piece of crochet lace.

G. R. Goodfellow, Esq.—

- Found note, Provident Bank, 1837.

- Miss Henrietta Guinness—
Crucifix, carved ivory.
- Dr. W. M. Harman—
Collection of coins and tokens.
- John Hilditch, Esq.—
Book: *Graphic Arts of China and Japan*.
Catalogue of a collection of Chinese paintings, etc.
- Edmund Jacob, Esq.—
Map of Queen's County, 1905.
- Junior Philatelic Society—
Specimens of the "Ideal Stamp."
- Miss L. A. Kemp—
Silver oval case.
Bostonsen enamel etui.
- F. Lavertine, Esq.—
Pound note, Cork Bank, 1813.
- A. Le Brocqy, Esq.—
Two Belgian postage stamps.
- The Duke of Leinster—
Eleven coloured drawings of Irish antiquities.
- J. B. S. MacIlwaine, Esq.—
Two wire shot cartridges.
- Metropolitan Museum, New York—
Catalogue of the Morgan Collection of Chinese porcelain.
- Mrs. De Courcy Miller—
Brass lock and key.
- J. J. Pakenham, Esq.—
Map of London in 1533.
- Miss A. Peter—
Wax impressions from David Garrick's seal.
- Dr. R. D. Purdy—
Stone slab reputed to be from St. Mary's Abbey.
West African wooden ceremonial bowl.
- Victoria and Albert Museum—
Book: *English Earthenware*.
Book: *English Ecclesiastical Stalactoides*.
- M. S. D. Westropp, Esq.—
Furthing of George III.
Medal, Cork Institution, by Messop.
Button, "Northern Rangers."
- H. Bentry White, Esq.—
Eighteenth-century casket.
- Commander Wilson—
Collection of weapons from the New Hebrides.
- Administrators of the late — Woodhouse—
Collection of books, coins, etc.
- Mrs. A. A. Wynne—
Scarf end, tambour lace.
Two pieces early English machine lace.

(c) LOANS.

- J. T. Andrews, Esq.—
Collection of Chinese porcelain (28 pieces).
- E. C. R. Armstrong, Esq.—
Egyptian scarab.
- Blayney R. T. Balfour, Esq.—
Sword used by King William at the Boyne.
Plan of the battle of the Boyne.
- Miss S. Bostable—
Additions to silver collection.

- Miss Maria H. Bouchier—
Three pieces of lace.
Eight miniature portraits.
- Miss Maria T. Collie—
Four water-colour drawings by Petrie.
- Miss M. Ferguson—
Lustre jug.
- F. W. Flood, Esq.—
Cut-glass colored bowls.
- Major J. J. Galloway, R.E.—
Coat and waistcoat of the Merchants, Corps, 1796.
- Miss Evelyn Gleeson—
Mahogany armoire.
- Chas. E. Gray, Esq.—
Lady's silk dress.
- Sir W. N. Hartley—
Doulton Ware jug, and biscuit barrel.
Two iron tea-kettles, Japanese.
- Mrs. Hutton—
Water-colour drawing by Petrie.
- E. W. Hoki, Esq.—
Pair of pistols, by Way, Kilkeny.
- Wm. Lane Joynt, Esq.—
Pistol, by Rigby, Dublin.
- J. B. S. MacDwalne, Esq.—
Two miniature paintings.
Four glass photographic positives.
Court sword and scabbard.
Two letters from Surgeon-General J. H. Porter.
Fowling-piece and pistol.
Fishing rod and leather shot pouch.
Two watches, etc.
- J. Mulhall, Esq.—
Collection of silver (80 pieces).
- Captain Musters—
Porcelain cup and saucer.
- P. J. O'Reilly, Esq.—
Two drawings, by Petrie, etc.
- Miss E. Patton—
Silver dish-ting.
Gorget, Irish Volunteers.
- Walter Pigot, Esq.—
Water-colour drawings (4), by Petrie.
Water-colour drawings (2), by Miss Petrie.
- Count Plunkett—
Books and manuscripts for Petrie Collection.
- Philip Redmond, Esq.—
Pair of flint-lock pistols.
- Andrew Robinson, Esq., C.V.O.—
Sketch Book, by Petrie.
- Royal Irish Academy—
Portrait and Bust of Petrie.
Books, manuscripts and drawings for the Petrie Collection.
- Sensfelder Club—
Collection of modern lithographs.
- Miss Gladys C. Smith—
Bilston enamel scent bottle.
- Victor E. Smyth, Esq.—
Japanese carved ivories (5).
Swiss wooden clock.

- Henry J. Stoken, Esq.—
Water-colour drawings (4), by Petrie.
- Mrs. Stone—
Miniature paintings (2).
Porcelain plaques (2) and Chinese jars (2).
Daguerreotype portrait of an officer.
- Greville E. F. Topplin, Esq.—
Ivory spoon.
- Victoria and Albert Museum—
Collection of illuminated manuscripts.
- Miss M. Wade—
Gilt chippendale mirror.
- Captain A. Ramsay Waller, R.E.—
Sectional drawing of Suez Canal.
Plans for dredger.

APPENDIX V

REPORT OF THE KEEPERS OF THE NATURAL HISTORY DIVISION.

The arrangement of the large collection representing the Irish Fauna in the lower Hall of the Natural History Building has been completed during the year. As the repainting of this Hall was undertaken last autumn by the Board of Works, the Collection referred to now appears to great advantage, and attracts numerous visitors from all parts of the country.

In the upper Hall much work still remains to be done in the fittings of the cases. More space is urgently required for the exhibition of specimens and for the Study Collections. Moreover, the Annex Rooms containing the Minerals, the Map of Ireland, Students' Room and General Collection of Fossils are no longer fit for the purpose for which they are at present used. I consider it advisable for the proper preservation of the Collection contained therein that this portion of the Museum be rebuilt without delay.

STAFF.—Mr. Nichols, with the assistance of Miss McNah, has continued the work of revising and classifying the general Collection of Bird Skins. Mr. Halbert and Miss Stephens have been largely engaged in the identification and classification of the animals collected by the Clare Island Survey parties. Miss Stephens, moreover, has undertaken the work of naming the Marine Sponges collected by Dr. Bruce on his way from the Antarctic regions in the steamer *Stella*. Mr. Seilide has been employed in identifying the large series of Marine Decapod Crustacea collected by the Fisheries Branch of the Department off the West Coast of Ireland, while I completed the examination and cataloguing of the large collection of bones made by Mr. Usher in the caves of Doneraile, Co. Cork. It is to be hoped that the report dealing with the results of the cave researches may be published by the Royal Irish Academy during the coming season.

Students' Room.—One of the attendants is largely engaged in the care of the Students' Room. I am pleased to be able to report that the number of students who availed themselves of the exceptional facilities offered by the Collections contained in this room have again increased from 2,927 in 1911-12, to 3,548 in 1912-13. If we add to this number approximately 500 Research Students who visit my private offices for study, the number of students reached altogether over 3,000. The available space being limited no further increase in the attendance of students is likely to take place until the accommodation is increased.

Acquisitions.—Large collections made during the Clare Island Survey have been deposited in the Museum by the Committee in charge of the

investigations. The most notable purchases include a collection of Rodents, a number of Japanese, British and Irish Bird skins and Chinese Mammal skins, a collection of South European Land and Freshwater Molluscs, a series of Insect galls, British Mycetozoa, Butterflies from the East Indies, and some beautiful wax models of Mites. The Reindeer from Newfoundland, given last year by Mr. A. Alexander, has now been suitably mounted. Two valuable series of heads and horns of antelopes were lent to the Museum—one by Captain Spinks, the other by Mr. Cruise, while Captain Long presented a collection of West African birds' nests.

Exchanges.—I have been able to recommend a number of exchanges of specimens with other Museums. We have thus sent Irish duplicates to Java, Copenhagen, Calcutta, Cambridge and Manchester, while in exchange for some art objects the Museum of Perth in West Australia forwarded a series of valuable skins of Marsupials.

Travelling.—That facilities should be granted to Museum officials for travelling has always been recognised. Not only is this of great importance for the inspection of objects offered for sale, but the identification of specimens is frequently impossible without careful comparison being made with the types contained in the large State Museums. The arrangement, methods of mounting and exhibition of objects in the various large Museums all deserve careful study. I was permitted to visit the dealers and Museums of London twice last year, I also spent a few days in Paris for the same purpose, and later on in the year studied the newly arranged collections in Liverpool and Edinburgh. Mr. Halbert went to Oxford in August to examine the extensive collection of Insects in the University Museum and to attend the International Congress of Entomology. In March, Miss Stephens spent ten days in the British Museum to identify some of the Deep Sea Sponges from the Scotia collection and also some Irish Marine Sponges.

The following reports on specimens contained in the Museum and papers dealing more generally with Museum matters were published by members of the staff:—

Halbert, J. N.—Hemiptera of Clare Island. *Proc. R. Irish Acad.*, Vol. XXXI. 1912. 10 pp.

Halbert, J. N.—Neuroptera of Clare Island. *Proc. R. Irish Acad.*, Vol. XXXI. 1912. 4 pp.

Halbert, J. N. (with Rev. W. F. Johnson)—Terrestrial Coleoptera. *Proc. R. Irish Acad.*, Vol. XXXI. 1912. 24 pp.

Nichols, A. E.—Polysca of Clare Island. *Proc. R. Irish Acad.*, Vol. XXXI. 1912. 14 pp.

Nichols, A. E.—Echinoderms of Clare Island. *Proc. R. Irish Acad.*, Vol. XXXI. 1912. 10 pp.

Scharff, R. F.—The Aims and Scope of a Provincial Museum. Belfast Public Art Gallery and Museum, Publ. 31. 1912. 13 pp.

Scharff, R. F.—Reptiles and Amphibians of Clare Island. *Proc. R. Irish Acad.*, Vol. XXXI. 1912. 4 pp.

Schäpe, C. M.—Some new Irish Myriopoda. *Irish Naturalist*, Vol. XXI. 1912. 3 pp.

Stephens, J. (Miss)—Marine Sponges of Clare Island. *Proc. R. Irish Acad.*, Vol. XXXI. 1912. 42 pp.

Stephens, J. (Miss)—Coelenterates of Clare Island. *Proc. R. Irish Acad.*, Vol. XXXI. 1912. 10 pp.

I beg herewith to submit a list of donations and loans registered by me during the past year.

R. F. SCHARFF,
Keeper.

NATURAL HISTORY DIVISION, DONATIONS.

- Allen, W. H.—
Mucilago spongiaria from the Phoenix Park, Dublin.
- Ascheton, R. W.—
Microscopical Slides of *Leptocera levis* from the Island of Mull and *Phascolion vulgare* from Kyle of Bute.
- Bell, Alfred—
Collections of Fossils from Great Britain, Sweden and Canada.
- Bigger, F. J.—
Collection of Animal Remains from Castle Sean, Ardglass.
- Boyd, Mrs. C. Agnes—
Hoopoe (*Upupa epops*) from Letterkenney, Co. Donegal.
- Browning, T. W.—
A Rock-Lobster (*Palinurus vulgaris*) from Coast of Co. Clare.
- Carey, Captain G. S.—
Small collection of Butterflies from Uganda and British East Africa.
- Carpenter, Professor G. H.—
False Scorpion (*Chernes scabius*) from Downpatrick.
- Colgan, N.—
Gastrea lacunosa and *Chitonactis coronata* from off Bullock, Kingstown.
- Cooke, J.—
A Char (*Salvelinus*) from Lough Tay.
- Costello, J. B.—
Left Horn Sheath of Ox, found in turf at Lisconley, Galway.
- Dehesa, Mons. E. G.—
Skin of *Falco eleonorae* from La Vacca Island off S.W. Sardinia.
- Delap, Miss—
Festucella holstoides from Valencia Island, Co. Kerry.
- De la Poer, H.—
False Monkey (*Cercopithecus patas*) from Désaig, Gold Coast.
- Dillon, Hon. R. E.—
Ballon's Skua (*Stercorarius pomarinus*) from Woodford, Co. Galway.
- Evans, Daniel—
Worm Tracks on Slate; Asbestos, etc., from Co. Kilkenny and Valencia Island.
- Fair, J. A.—
Barn Owl (*Strix flavescens*) from Comalean, Cavan.
- Fogarty, Henry—
Festucella holstoides from Adare, Co. Limerick.
- Foster, N. H.—
Collection of Myriapoda from Counties Down, Monaghan and Derry. A False Scorpion (*Obolus lubricus*) from Corry's Glen, Co. Down. Collections of Woodlice (chiefly Irish).
- Geoghegan, R. H.—
Two specimens of Neuroptera (*Neuroptera bipennis*) from Huelva, Spain.
- Good, F. Newby—
Char (*Salvelinus colii*) from Lough Glenwough, Co. Mayo.
- Gordon, R.—
Baby-tailed Fly (*Hedychrum bacillifera*) from Phoenix Park, Dublin.
- Grant, Colonel C. C.—
Collection of Palaeozoic Fossils from Canada.
- Haughton, S.—
Onchorynchus schauinslandi and *O. kinloch* from Straits of Georgia, B.C., Canada.
- Hilton, A. R.—
Spongiae of *Bathysia striatella* from Highgate Woods, N. London.
- Houghton, Major—
Collection of Bird Skins from W. Africa.

[331]

- Indian Museum, Trustees of—
Co-type of Freshwater Medusa (*Limonocleis indica*) from Medha,
Yenna Valley, Satara District, India.
Collection of Indian Freshwater Sponges.
- Irwin, A. P. B.—
Brow-Antlered Deer (*Cervus eldi*) from Tambo, Burma.
- Irwin, Captain R. B.—
Cora Crabs (*Cora protensis*) from Swords, Co. Dublin.
- Johnson, Rev. W. F.—
A Collection of Insects from Clare Island District.
- Keane, J.—
A few Crabs and a vertebra of Basking Shark from Co. Cork.
- Kekall, Major H.—
Small collection of Bird Skins from Sierra Leone.
- King, J. J. F. M.—
Four specimens of Dragon Fly (*Agrion hastulatum*) from Arismore,
Scotland.
- Kolbe, H.—
Collection of European Carabidae.
- Lafferty, H. A.—
Whale Vertebrae from Coast of Sligo.
- Levinson, Professor G. M. R.—
Thomomys muricatus from Davis Strait.
- Long, Captain H. W.—
Collection of Birds' Nests, Eggs, etc., from Sierra Leone.
- Lönnberg, Professor—
Four specimens of Scandinavian Lemming from Gellivare, Lapland.
- Lundbeck, Dr.—
Murex tenuis from Skagerrak.
- Maherly, Dr. F. H.—
Common Sandpiper (*Totanus hypoleucos*) from Cronshaven, Co.
Cork.
- McDougall, Dr. Ronald—
Egg of Megapode (*Megapodius pritchardi*) from Niniaou Island,
Tonga Islands group.
- Mahon, Sir W.—
Hen Harrier (*Circus cyaneus*) from Ahascragh, Co. Galway.
- Montmorency, Rev. A. H. de—
Mammalian remains from a Crannog, St. John's Lake, near
Ballinamore, Co. Leitrim.
- Moore, Sir F. W.—
Small collection of Myriopods from Burma.
- Nuttall, G. H. F.—
Small collection of Ticks (*Ixodidae*).
- O'Mahony, Pierce—
Bufo viridis from Bulgaria.
- Pack-Berensford, D. R.—
Small collection of Insects and Myriopods from Ireland, Algiers
and North Italy.
Five specimens of *Blanus purpurascens* from Launceston, Tasmania.
- Patten, Prof. C. J.—
Small collection of Bird Skins, etc., from Clare Island.
- Perceval, J. J.—
Eider Duck (*Somateria mollissima*) and Sculp Duck (*Fuligula
marila*) from Co. Wexford.
- Phillips, R. A.—
Paludastrea confusa from the Rivers Shannon and Barrow.
Paludina vivipara dredged from River Suir, at Waterford.
- Rotham, E. C.—
Horn Sheaths of Sheep from a bog in Co. Westmeath.
- Scott, Professor A.—
Skull of supposed Greyhound Fig.

- Smyth, V.—
Skins of *Psilorbis parvulus* and *Sciriosus chryscephalus* from Queensland, Australia.
- Stokes, Dr. H.—
Remains of Dog from Rathdowney, Queen's County, and remains of Irish Elk (*Cervus giganteus*) from Howth, Co. Dublin.
- Stuesser, J.—
Small collection of Austrian Woodlice.
- Thornely, Miss.—
Egg Cocoon of Spider (*Agalea brunnea*) from Ambrosia.
- Tottonham, C.—
Green Woodpecker (*Geothlypis viridis*).
- Twigg, Major G. V.—
Four Edible Sunflower Nests from Siamese Coast.
- Usher, R. J.—
Black Guillemot (*Uria grylle*), Lesser Redpoll (*Lineta rufopectus*) and Pied Wagtail (*Motacilla lugubris*) from Co. Waterford.
Common Newt from Cappagh, Co. Waterford.
- Varian, I. S.—
A Domestic Powl (*Gallus domesticus*). "Hibernian Breed."
- Walsh, W. E.—
Collection of Lepidoptera from Java.
- Watson, J. H.—
A few Insects.
- Welch, R.—
A small collection of Irish Myriopoda.
- West Australian Museum—
Skins of fourteen Australian Marsupials.
- Wright, Captain W.—
Pieces of Pitch Pine bored by *Xyleptops dorsalis*, trawled off Galley Head, Co. Cork.

LOANS.

- Cruick, H. R.—
Skull and Horns of seven Antelopes from Nymanland.
- Spinks, Captain C. W.—
Mounted heads (with horns) of nine Antelopes from Sudan.
Skull and horns of Tora Hartbeest from Sudan.

BOOKS AND PAMPHLETS.

- Alabaster, E. P.—
Pamphlet.
- Annandale, N.—
Two Pamphlets.
- Australian Museum, Trustees of—
Records, Vol. VIII, No. 3; Vol. IX, No. 1; Vol. X, No. 1.
Sydney, 1912-13.
- Baker, H. B.—
Pamphlet.
- Baumann, F.—
Pamphlet.
- Belfast Naturalists' Field Club.—
Annual Report for the year ending March 31st, 1912. Belfast, 1912.
- Bell, A.—
Pamphlet.
- Blanc, H.—
Le Musée Zoologique de Lausanne. Lausanne, 1912.
- Brazil, L.—
Four Pamphlets.

- British Museum, Trustees of—
 Catalogue of the Chiroptera in the British Museum, Vol. II. By K. Anderson. London, 1912.
 Catalogue of the Lepidoptera Phalaena in the British Museum. Vol. XI, and Plates. By Sir G. E. Hampson, Bart. London, 1912.
 A Revision of the Ichneumonidae in the British Museum. Pt. I. By C. Morley. London, 1912.
 Guide to the Exhibition of Animals, Plants and Minerals mentioned in the Bible. British Museum (Natural History) Special Guide, No. 5. London, 1911.
 General Index to a Hand-List of the Genera and Species of Birds. By W. R. Ogilby-Grant. London, 1912.
 National Antarctic Expedition, 1901-1904, Nat. Hist., Vol. VI., Zoology and Botany. London, 1912.
 A Monograph of the Mycetozoa in the British Museum. By A. Lister. London, 1911.
- Durham Philosophical Society, University of—
 Proceedings, Vol. IV., Pt. 3. Newcastle-on-Tyne, 1912.
- Ewart, E. Cowan—
 Pamphlet.
- Field Museum of Natural History, Trustees of—
 Publication 169. Chicago, 1912.
- Grant, Colonel G. C.—
 Journal and Proceedings of the Hamilton Association. Sessions 1894-95, 1905-06, 1907-08, 1908-09, 1909-10. Hamilton, Ontario, 1895-1910.
- Halbert, J. N.—
 Twenty-one Pamphlets.
- Hilfsheimer, Max—
 Six Pamphlets.
- Holt, E. W. L.—
 Pamphlet.
- Hopkinson, J.—
 Pamphlet.
- Hoyk, W. E.—
 Pamphlet.
- Imperial Department of Agriculture for the West Indies—
 Insect Pests of the Lesser Antilles. By H. A. Ballou. Barbados, 1912.
- Indian Museum, Trustees of—
 Annual Report, 1911-12, Pts. I-II. Calcutta, 1912.
 Records, Vol. IV., Pt. 10, and Index; Vol. VI., Index; Vol. VII., Pts. 1, 2, 3, 4; Vol. VIII., Pt. 1. Calcutta, 1912.
 Indian fish of proved utility as Mosquito destroyers. By R. B. S. Sewell and B. L. Choudhury. Calcutta, 1912.
 The Crinoids of the Indian Museum. By A. H. Clarke. Calcutta, 1912.
- Irish Naturalist, Editors of—
 The Entomologists' Record, Vol. 23. London, 1911.
 Wiener Entomologische Zeitung, XXX. Wien, 1911.
- Jackson, J. W.—
 Further Report on the Explorations at Dog Holes, Warton Crag. Lancs. Manchester, 1911.
- Jameson, H. L.—
 Pamphlet.
- Janet, C.—
 Five Pamphlets.
- Longstaff, Mrs. Jane—
 Pamphlet.
- March, M. C.—
 A Discussion of the General Classification of the Pelecypoda. London, 1912.

- Marine Biological Association of the West of Scotland—
Annual Report for 1911.
- Melhuir, W. D.—
Pamphlet.
- Meek, A.—
Dove Marine Laboratory, Collieston, Northumberland, Report
for the year ending June 30, 1912. Newcastle-upon-Tyne, 1912.
- Moore, Sir F. W.—
Boletín de Bosques, Pesca i Caza, Tomo I, Num. 1, 4. Santiago
de Chile, 1912.
- Naples, University of—
Annuario del Museo Zoologico della R. Università di Napoli.
(N.S.), Vol. III., Num. 13-27. Napoli, 1910-12.
- Natal Museum—
Annals, Vol. II., Pt. 3. London, 1912.
- Naturhistorisches Museum, Basel—
Pamphlet.
- Nichols, A. R.—
Two Pamphlets.
- Nova Scotia Institute of Science—
Proceedings and Transactions, Vol. XII., Pt. 3; Vol. XIII.
Pts. 1, 2. Halifax, 1912.
- Pallary, Paul—
Two Pamphlets.
- Pearson, J.—
Spolia Zeylanica, Vol. VIII., Pts. 30, 32. Colombo, 1912-13.
- Pennell, E.—
Two Pamphlets.
- Philadelphia, Academy of Natural Sciences—
Annual Report for 1911.
- Rome, Ministry of Agriculture, Industry and Commerce—
Studi Topografici. Roma, 1912.
- Royal Dublin Society—
Scientific Proceedings, Vol. XII. (N.S.), Nos. 24, 25, 26, 29, 31,
32, 34, 35, 36, 37; Vol. XIII. (N.S.), Nos. 3, 4, 5, 6, 7, 15,
17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33.
Dublin 1910-13.
- Economic Proceedings, Vol. II., No. 5. London, 1912.
- Royal Irish Academy—
Proceedings, Vol. XXX. Nos. 1, 2, 3, 4, 5; Vol. XXXI., Nos. 16,
16, 17, 18, 19, 20, 25, 27, 28, 30, 31, 33, 34, 40, 41, 42, 44,
46, 53, 56, 57, 58, 59. Dublin, 1912-13.
- Index to the Serial Publications of the Royal Irish Academy from
1786 to 1906, inclusive. Dublin, 1912.
- Sarsen, Paul—
Pamphlet.
- Sarawak Museum—
The Sarawak Museum Journal, Vol. I., No. 2. Singapore, 1912.
- Scharff, Dr. R. F.—
Ninety-six Pamphlets.
- The Aims and Scope of a Provincial Museum. Belfast, 1912.
- Phylogeny of the Echini. By T. R. Jackson. Boston, 1912.
- The British Carboniferous Trepostomata. By G. W. Lee. London,
1912.
- Secretary of State for India—
Fauna of British India. Diptera Nematoidea. By E. Brunetti.
London, 1912.
- Sedgwick Museum, Cambridge—
Forty-sixth Annual Report of the Museums and Lecture Room
Syndicate. Cambridge, 1912.
- Sellie, C. M.—
Two Pamphlets.

Smithsonian Institution—

Report of the Secretary for the year ending June 30, 1911.
Washington, 1911.

Cambrian Geology and Palaeontology I., Nos. 1, 2, 3, 4, 5, 7;
II., Nos. 1, 4, 6, 7, 8. By O. D. Walcott. Washington,
1908-12.

U. S. National Museum:—

Proceedings, Vols. 40, 41. Washington, 1911-12.

Bulletin, 50, Pt. 5. Washington, 1911.

Report for the year ending June 30, 1911. Washington, 1912.

State Museum, University of Washington, Seattle—

Pamphlet.

Stebbing, Rev. T. R. R.—

On the Crustacea Isopoda of the "Porcupine" Expedition.
London, 1913.

Steindachner, F.—

Notizen, Jahresbericht für 1910. Wien, 1911.

Usher, R. J.—

Pamphlet.

Waite, E. R.—

Records of the Canterbury Museum, New Zealand, Vol. I., No. 4.
Christchurch, New Zealand, 1912.

Ward, Rowland—

Deer Breeding for Fine Heads. By W. Winans. London, 1913.

Weber, M.—

Two Pamphlets.

Williams, H. S.—

Pamphlet.

APPENDIX VI.

REPORT OF THE CURATOR OF THE BOTANICAL SECTION.

HERBARIUM OF FLOWERING PLANTS.

Room III.

The most important addition to the collections in this Room received during the year is the herbarium of the late Richard Vorell presented by Mrs. Vorell. This herbarium contains a great number of specimens from Ben Bullen and other parts of Co. Sligo, and greatly enriches the Irish Collection. It will be much appreciated by Irish field botanists.

Many specimens have been identified for teachers and students throughout the year. To help the children and teachers of National Schools a leaflet giving directions for collecting plants and describing the best methods of drying and mounting the specimens was prepared and is now on circulation. The Hand List of Irish Flowering Plants and Ferns has been revised and brought up to date. A second edition has been called for and will shortly be issued.

Four hundred and twenty-two students consulted the collections in this room during the year.

ECONOMIC COLLECTIONS.

Rooms II. and IV.

The upright cases necessary to complete the equipment of Room IV. have now been supplied, and the Economic Collections of this room are being re-arranged.

Some additions have been made to the collection of Fossil Plants which are now better displayed.

Ornament lamps have been supplied to both rooms and the lighting is much improved, though the lamps need re-arranging to suit the additional cases.

TEACHING COLLECTION.

Room I.

A series of models of type flowers illustrating some of the more important Irish Natural Orders has been acquired and displayed in the wall-case, side by side with specimens of the actual flowers preserved in spirits. Descriptive labels and diagrams have also been added.

Another recent acquisition is a collection of models of American Fossil Cycads, prepared by H. R. H. Smedley from drawings supplied by Dr. G. R. Wieland, whose book on American Fossil Cycads has also been acquired.

HERBARIUM FOR FLOWERLESS PLANTS.

Room V.

This room contains the collection of Flowerless Plants. It is just as necessary to have this room suitable for the use of students as the general Herbarium.

The collections, containing, e.g., specimens of the fungi causing diseases of crops and timber, need a good light for their examination.

This room, the Herbarium and my room, need all the light obtainable, to remove their "well" character.

T. JOHNSON.

DONATIONS—SPECIMENS.

Adams J.—

A large collection of Irish Parasitic Fungi (named).

Clare Island Survey Committee—

Four hundred and fifty specimens of Algae collected on the Clare Island Survey Expedition, and named by A. D. Cotton, of Kew.

Limerick Field Club, through Dr. Fogarty—

Seven sheets of Irish Willows, including a new one (*Salix Alba*) *S. Pentandra*.

Lorrain-Smith, F.L.S., Miss A.—

Specimens of *Loeskea Pleospora* from sand dunes, Freshfield.

Praeger, R. L., M.R.I.A.—

A small collection of Lichens from Tunn, Co. Galway.

Vowell, Mrs. R. P.—

The collection of Plants belonging to, and made by, the late R. P. Vowell, containing about 2,600 specimens; among them being those collected on the Sligo mountains and those from the shores of Lough Bee, collected in company with R. M. Barrington.

Waddell, Rev. H. C.—

Two hundred specimens of North American Plants collected in Pennsylvania, etc., by Wm. O. Barber, 1899.

BOOKS, PAMPHLETS.

Agricultural Gazette, New South Wales. Vol. XXIII.

Agricultural Ledger.

Annual Report, Botanic Gardens and Government Domains, Sydney for the year 1911. By J. H. Maiden, Director.

Contributions from the U. S. National Herbarium. Vol. XIV, Pt. 1 Vol. XVI, Pts. 2 and 3.

Critical Revision of the genus *Eucalyptus*. Vol. II, Nos. 4, 5 and 6.

[337]

- Diseases and Pests of the Coconut Palm. By W. W. Froggatt, F.L.S.,
 Depart. Agri., N.S. Wales. Sci. Bulletin, No. 2, August, 1912.
- Floes of the Upper Gangetic Plain—Plumbaginaceae to Plantaginaceae.
 By J. F. Duthie, B.A., F.L.S.
- Journal, Department of Agriculture, Victoria. Vol. X.
- Journal, Board of Agriculture and Fisheries, England. Vol. XIX.
- Leaflets, Board of Agriculture and Fisheries, England. Nos. 259, 261,
 263-265.
- Memoirs of Geological Survey of Ireland. A complete set.
- Notes from the Botanic Gardens, Edinburgh. Nos. 2-9, 11-19, 21-24,
 26, 27, 31-35.
- Records, Botanical Survey, India. Vol. IV., Nos. 5 and 6; Vol. V.,
 Nos. 2 and 3 and Report for 1910-11.
- Soils of the Hawkesbury Agricultural College Farm. By H. J. Jensen,
 D.Sc. (Department of Agriculture, N.S. Wales. Sci. Bulletin,
 No. 8, July, 1912.)
- Soils of Cowra and Wagga Experimental Farms and S.W. Slopes. By
 H. J. Jensen, D.Sc. (Department of Agriculture, N.S. Wales.
 Sci. Bulletin, No. 8, September, 1912.)
- West Indian Bulletin. Vol. XII., Nos. 1, 2, 3 and 4; Vol. XIII., No. 1.

APPENDIX VII.

REPORT OF THE CUSTODIAN OF THE MINERALOGICAL SECTION.

Early in 1912, a collection of minerals made by Mr. Walker about 1835 became available in the London market, and several choice specimens were secured for the National Museum. All these, though representative of well-known minerals, were well worth acquiring, being fine examples and admirably preserved. Among them may be mentioned native silver from Königsherg, and a large twin crystal of Adularia from the St. Gothard area.

Among other additions made by purchase were a handsome slab cut from the iron meteorite found near Gibeon in German S.W. Africa, and a typical series of meteoric stones from the remarkable shower that fell in Arizona on 19th July, 1912. Several specimens of the feldspathoid, *silicites* found in the lavas near Rome, and of rare minerals from Madagascar, were bought, and examples were added of newly described minerals from various localities. The following were presented to the collections:—

- Limestone with Calcite Crystals, Ontario. Rev. J. T. Griffin.
 Gypsum, Ballymurphy, Belfast. R. Bell, Esq.
 Pyrite, Castleknock. M. McGahey, Esq.
 Pyrite, Lisconnor, Co. Clare. J. Carroll, Esq.

GRENVILLE A. J. COLE.

REPORT OF THE BOARD OF VISITORS
OF THE
NATIONAL MUSEUM OF SCIENCE AND ART, IRELAND,
AND THE ROYAL BOTANIC GARDENS, DUBLIN,

For the Year ending 31st March, 1913.

TO THE DEPARTMENT OF AGRICULTURE AND TECHNICAL
INSTRUCTION FOR IRELAND.

The Board of Visitors submit the following as their Report
for the year ending 31st March, 1913.

NATIONAL MUSEUM.

On the 12th April, 1913, the Visitors made their annual
inspection of the Museum.

Before considering the various divisions they desire to make
the following general observations.

The Visitors are pleased again to record a very considerable
increase in the attendance of the public. The number who
passed through the turnstiles during 1912-1913 was 285,127,
as against 278,477 for the year 1911-1912, showing an increase
of 6,650.

The Visitors notice that a considerable improvement has
been made in the Central Court by the re-arrangement of the
Foley statuary, and they are glad to be able to record that
an improvement is being made in the lighting of this part
of the Museum by the erection of three clusters of electric
lights in place of the electric arc lamps which never gave
satisfaction. The judicious colouring of the walls of this
court, recently carried out, has proved most satisfactory. The
lower portion of the Natural History Division has also been
painted.

The re-framing and re-arrangement of the Water Colour
Collection has been carried out with considerable success.

It is also satisfactory to find that since the Visitors made

[389]

their last inspection the damp condition of some of the rooms, to which attention was called in the last report, has to some degree been remedied.

The Visitors are of opinion that this dampness in the walls will be continually recurring so long as the down-pipes are concealed in the walls. These pipes should be put outside, and they could be painted the same colour as the stonework against which they rest.

The Visitors consider that the lighting of some of the upper rooms could be improved by letting glass into the roofs. This should be done in all the roof rooms, as it has proved very successful in the Irish Antiquities Division, where it was done some years ago.

The Porcelain Room is especially in need of roof lighting. This is also the case in some of the rooms in the Botanical Section where, owing to the poor lighting, it is almost impossible to do satisfactory microscopic work. This difficulty has, however, been partly overcome by providing a room for the Microscopes on the main staircase.

The Visitors are still of opinion that the platforms mentioned in their last Report should be erected in the Botanical Rooms III. and V. Although these platforms were approved of, and thought necessary by those who daily use the rooms, the suggestion was not adopted by the Board of Public Works.

The Visitors desire to record their special thanks to Mr. W. R. Lane Joynt for arranging the Stamp Collection to which many valuable additions have been made during the past year.

Thanks are also due to Mr. Lane Joynt and Mr. J. B. S. MacIlwaine for their very valuable contributions to the Course of Lectures delivered in the Museum Lecture Theatre as follows :—

COUNT G. N. PLUNKETT	"Lithography."
MR. W. R. LANE JOYNT	"Interesting Varieties of the Stamps of the British Isles."
MR. J. B. S. MACILWAINE	"The British Coinage from James I. to Queen Anne, 1603-1714."
MR. M. S. D. WESTROPP	"Dublin Silver and its Marks."
MR. A. R. NICHOLS	"Irish Birds."
PROF. T. JOHNSON	"A Piece of Timber."
MR. G. R. STANTON	"The Greek House."
COUNT G. N. PLUNKETT	"Some Irish Engravers."
MR. A. J. TOPPIN	"English Furniture."
MR. A. MCGOGGAN	"Two famous Dublin Medallists."
MR. E. C. R. ARMSTRONG	"Arts of the Stone Age."
MR. J. J. BUCKLEY	"The Art of the Tapestry Weaver."

The average attendance at the course was 69.

The Visitors are glad to find that this important item in the work of the Museum is being appreciated by the public. It should be of great utility by drawing public attention to the advantages which may be obtained from a serious study of the collections. The delivery of the lectures imposes a considerable amount of extra labour on the members of the staff, who are already fully occupied; they have therefore to prepare for and deliver the lectures after official hours. The Visitors trust that, considering the usefulness of the object attained, the Department may be able to obtain for the Lecturers some extra remuneration.

The Visitors have again to call attention to the want of a proper office and workroom for the Keeper of Irish Antiquities, and they regret to find that no attention has been paid to their former recommendations. The room on the first floor which is now used as an office is urgently required for exhibition purposes. The Visitors, with the assistance of the late Sir Thomas Drew, submitted a scheme which could have been carried out at a moderate expense, and which would have attained the desired object.

The Visitors regard the addition of three more attendants to the staff during the past year as a most valuable concession.

The Visitors are glad to learn that the new buildings in Merrion Street are now to be proceeded with, thus enabling them to look forward to the proposed, and very much needed, extension of the Museum in the near future, and the abolition of the sheds which constitute the Annex.

The Visitors regard with great satisfaction the steady increase which takes place year by year in the number of persons making use of the Museum collections for serious study, of which details will be found in the Reports on the several collections.

ART AND INDUSTRIAL COLLECTIONS.

A notable addition to the Military Collection is that of a Grenadier Cap belonging to the Royal Regiment of Ireland, subsequently the 18th Royal Irish, of the pattern worn about 1695. This unique exhibit has been lent by Mrs. Phillips.

A small collection of Lithographs of fine quality has been kindly lent by the recently formed Senefelder Club.

Room VI.—The only addition to this Room is an ancient sculptured stone Stoup or Font presented by Captain Wilkinson, C.V.O.

Room VII.—Some additions have been made to the collection of Violins by Irish makers, and further specimens have been acquired for the Bagpipe Section, including an interesting "Tutor" of an early date.

[341]

The Visitors again call attention to the dampness of this Room, and hope that further steps will be taken to remedy this condition.

Room VIII.—There are no additions of importance to this section, but the arrangement of the exhibits has been greatly improved by the extension of the platforms to the window side. The condition of the furniture has also been improved by judicious cleaning.

Room IX.—A French Mahogany Armoire of an exceptionally early date and fine condition is on exhibition, lent by Miss Gleeson.

Annexe L.—The most important addition to the Museum for many years has been successfully erected in this Annexe. It consists of the "Apollo" ceiling, walls, and fireplace of the Georgian drawing-room formerly at No. 40 Stephen's Green. The removal of this room was necessitated by rebuilding, the site having been acquired by the Governors of the Bank of Ireland. The re-erection of this room has been most carefully carried out, but it seems a pity that a permanent place could not have been provided for so valuable an exhibit; a second re-erection of the plaster ceiling, which must of necessity follow the extension of the Museum buildings, may prove disastrous.

Room V., Upper Floor.—A Plan of the Battle of the Boyne has been lent to this section by Mr. B. R. Townley Balfour, who has also lent the ivory hilted sword said to have been worn by King William on this occasion, which is exhibited in the lower Gallery.

Rotunda Gallery.—An Irish Cake Basket and two Chalicees of exceptional interest form the principal additions to the silver collection. A full description of these objects will be found in the "Museum Bulletin" for September, 1912.

Upper Gallery.—The Visitors notice with regret that the very valuable collection of Irish and other Lace is so cramped for space that its proper exhibition is seriously interfered with. Several additions of importance have recently been made.

Room VIII.—Further progress has been made with the re-arrangement of the collection of Porcelain and Pottery; the space available is, however, quite inadequate for the proper study of the exhibits. The Visitors would suggest that the temporary removal of the casts in the adjoining room would afford some relief to the present congestion.

Room IX.—Additions have been made to the collection of Chinese costume.

Room X.—An exceptionally interesting embroidered Bed Quilt of English workmanship has been lent to this section by Mrs. Dames Longworth.

GREEK AND ROMAN ANTIQUITIES, ROOM I.

The Visitors have no important acquisitions to report, but by the inclusion of some casts of architectural ornamentation of the Minoan and Mycenaean periods, further interest has been added to this very early art, which is dated back between 3000 and 4000 B.C.

EGYPTIAN COLLECTION, ROOM II.

The Visitors have pleasure in recording two further donations from the British School of Archaeology, some alabaster jars and dishes, and a wooden bed and two coffins of a very early period.

From the Egyptian Exploration Fund, to which the Museum subscribes, have come a collection of pottery of which some examples has well defined painted decoration. These are pre-dynastic and very primitive, and are an important acquisition. The Visitors note that by the removal of some of the plaster casts more space has been made available in this room enabling the collection to be more satisfactorily shown.

ETHNOGRAPHICAL COLLECTION, ROOM III.

There have been no acquisitions during the year, but the Visitors are pleased to be able to report that the arrangement of the objects in the new long case has been completed, and in most of the other cases the collections are shown to better advantage from the slight increase in space. They regret to have to report that a portion of the outer wall has been very damp, owing to the faultiness of a rain water down-pipe, and this has necessitated the removal of some of the important collection lent by Trinity College, which fortunately, however, was not damaged.

IRISH ANTIQUITIES.

In the Irish Antiquities the Visitors have little to note compared with the numerous changes recorded last year. This largely results from the advance made in the arrangement of the objects, necessitating few alterations.

In an earlier portion of this report the Visitors have again called attention to the necessity of providing a proper office for the Keeper. Until this room is available for the exhibition of the collection no finality can be attained in the arrangement. Unfortunately, too, one of the largest and most lightsome of the four rooms available for the display of the Irish collection is occupied as an office. That all the rooms should be rendered available is most desirable, where their contents, as in this case, are of the first importance—the records of the national advance in past ages.

In Room No. II. a number of stone implements have been put on exhibition, including the Cushendall axes, presented by Mr. Knowles, and a collection of celts arranged under counties.

In Room No. III. the Visitors see the stone moulds for casting bronze weapons and implements. They were purchased from Mr. Seaton Milligan. Two splendid bronze spear heads are exhibited, also the swords obtained through Mr. Plunkett from a find at Tempo, Co. Fermanagh, and the remarkable, if not unique, rapier from Lissane and one from Crom Castle.

There are also exhibited food vessels from Crumlin, Co. Dublin, and Cullaghan, Co. Mayo.

In Room IV. two more stone lamps (of the type formerly mis-called "chalices") are exhibited. The three table cases, with rings, seals, etc., in the last window, have been removed, and their re-arrangement is far advanced. It is hoped that they can be put back at no distant date.

In the crypt the Visitors note several stone inkstands and two ogham stones added to the collection of the Royal Society of Antiquaries of Ireland now on exhibition.

The labelling of the coins and the splendid collection of medals of the Royal Irish Academy's collection has been completed. The cabinets may be examined in the Curator's room. It is undesirable to leave them exposed to the roughness of the younger public, who love to pull out and push in the drawers.

Attention may be called to the growing collection of photographs of Irish Architecture and Antiquities in the rooms next the offices in Leinster House. Beside the Dunraven Collection a selection from the large series of photographs enlarged from negatives by Mr. T. J. Westropp appear. These give examples from various parts of Ireland of the dolmens, pillars and ogham stones, the ring forts and promontory forts, tumuli and moats, castles and peel towers, huts, oratories, monasteries, and churches from the earliest period to the close of the fifteenth century. The graceful late Gothic from the thirteenth to the fifteenth century in western and southern Ireland is well represented.

ZOOLOGY AND GEOLOGY.

Much useful and laborious work has been accomplished by the staff during the year in arranging and classifying the exhibits and reserve specimens. In particular the naming and cataloguing of the excellent collection of bird skins—numbering nearly 15,000—has made satisfactory progress.

A number of interesting additions have been made, enabling the staff to complete, or fill up gaps in, several of the series of animals already in the possession of the Museum.

The walls of the main room on the ground floor, to which attention was called in the last report of the Visitors, have been cleaned and painted, and thereby a vast improvement in lighting of the room has been obtained. An interesting series of specimens from the Irish whaling stations has been added to the collections in this room.

The Clare Island Survey Committee has presented many specimens of Irish animals, and numerous small collections have been presented by other donors, or purchased by the Museum authorities. A fine specimen of Reindeer, recently purchased, and a large Ptas Monkey, given by Mr. H. de la Poer, have been placed in the main Zoological Collection in the large room. Another notable addition is a beautiful series of micro preparations of Rotifers.

The fitting up of the underground storeroom is getting on slowly. The ventilation is very imperfect, and owing to the proximity of the steam pipes the heat is excessive. Late in the afternoon of April 12th, the temperature in the storeroom was found to be 75°. The Visitors hope that more rapid progress will be made in supplying the room with the necessary cases, and that the ventilation will be improved.

In two former Reports the Visitors urged that steps should be taken to have the names of their localities engraved upon the beautiful examples of Irish Marbles which adorn the Rotunda and the Entrance Hall of the Museum. Nothing has, however, been done, and the dirty and illegible paper labels, condemned three years ago, still remain fixed to a few of the specimens. The Visitors hope that if, as seems to be the case, a divided authority may be the cause of this neglect, steps will be taken by the proper authorities to fix responsibility and to have the marbles identified and engraved. At the present time when so much interest is taken in Irish products, it is both surprising and disappointing to find so excellent an opportunity thrown away of drawing public attention to the fine marbles of Ireland.

On many occasions the Visitors have condemned in the strongest possible terms the old cattle shed rooms and the passage numbered Annexe I., II., III., IV., and V. These rooms are a disgrace to the Museum, and it is much to be regretted that those who are responsible for the housing of the National Museum of Ireland have not been forced by public opinion to sweep away the sheds and replace them by a gallery worthy of the valuable collections which they contain. Apparently the dilapidation of the sheds has come to be regarded as a reason for permitting their walls to remain in a filthy and unsightly state. The condition of the end wall, and of the roof, of the shed numbered Annexe III. can only be explained on the assumption that the authorities are quite ignorant of the value and interest of the collections entrusted to their care.

[345]

BOTANY.

The unsuitability of the Rooms assigned to the Botanical collections has been urged, and their isolation from the other Natural History collections has been pointed out in several reports. Want of space also cramps the development of the section. A fine collection of peat specimens and illustrations of the industrial applications of peat cannot be exhibited for want of room, and it has been found impossible to develop properly the exhibit of Timber diseases, as there is not sufficient space available.

In summer the ventilation of the rooms, especially that of the small room for the attendants, calls for improvement. Much might be effected by the fitting of roof ventilators.

In winter the heating of the section also is deficient, and open fires, which are admittedly objectionable in such a position, cannot be dispensed with in the Herbarium.

The Custodian's room might be much improved by double glazing in the roof, and by the replacement of the canvas partition by a more solid one.

In Room IV. the fine set of new cases enable the Economic collections to be much more satisfactorily displayed than formerly; but a re-arrangement of the electric light pendants is necessitated by the altered position of the cases.

In the Index Room two electric lights are needed to allow visitors to make use of the revolving microscope and the stereoscope when daylight fails.

The set of Oliver's Floral Diagrams, formerly lent by the Royal College of Science and now returned, should be replaced and use made of the fine case in which they were shown.

The Visitors desire to draw attention again to the need of a special Cryptogamic Assistant to arrange and work up the very fine collection of Fungi, Algae, mosses, liverworts and lichens in this section. It is a great pity that such an excellent collection should have to be left unarranged and practically inaccessible to workers for lack of this assistance.

ROYAL BOTANIC GARDENS.

The Board of Visitors made their annual inspection of the Royal Botanic Gardens on Saturday, 12th April, 1913, and have pleasure in reporting, as in former years, that they found them to be in excellent condition.

The number of visitors to the Gardens during the year ending 31st March, 1913, was 424,118, as against 445,462 for the previous twelve months, showing a decrease of 21,344. This unusual falling off in the attendance of the public is doubtless due to the very wet summer.

The Visitors are glad to report that considerable progress has been made towards carrying out the recommendations which they made in their Report for the year ended 31st March, 1910, regarding the erection of new buildings.

The Visitors were glad to notice that the old refreshment room has been taken down, and that the new lodge, where the goods entrance is to be made, is well advanced. Also a bicycle shed is being provided, and the Visitors hope to see in the near future the present old range of propagating houses replaced by an up-to-date erection. They also hope to see an attractive refreshment room erected within the grounds.

The Visitors regret that nothing has yet been done towards carrying out the recommendation which they made in their last Report as to providing sheds for the protection of water-carts, hand-carts, barrows, ladders, etc. These garden requisites have still to be kept in the open, where they suffer much deterioration from exposure to all weathers.

The Visitors are glad to observe that since their last inspection of the grounds and houses many improvements have been carried out. The house in the Alpine yard has been renewed, the Cactus house and Camellia house thoroughly repaired and painted inside and outside, and a large pot store, capable of holding about 10,000 pots, has been provided.

Many new frames have been supplied to replace old decayed structures, and a substantial fence has been placed round the shrub field.

There are still some of the houses very much in need of repairs and paint, but the Visitors hope that this work will be carried out before their next inspection.

Most satisfactory work has been carried out in the grounds; amongst other things they noted the extension of the Bog Garden and the addition to the beautiful Rock Garden, where many rare plants, which it was found difficult to grow before, are now rapidly extending their roots in their new environment. The Tree Nursery has also been considerably extended by clearing away some very old elms.

The Visitors again call attention to the urgent need which exists for proper library accommodation. The valuable books which were left to the Gardens some years ago by the late Mr. Gumbleton, of Cork, valued at about seven hundred pounds, are still unprovided with shelves, and lie stacked, with many other valuable works, in a room quite unfitted for even a book store.

[337]

No improvement has as yet been made in the accommodation for Men Improvers. As was pointed out in the last Report, eight men have to sleep in two small rooms, each of which is less than fourteen feet square. Such residential quarters as these would be at once condemned by any sanitary authority. When an infectious sickness breaks out in these rooms, as it has in former years, it runs through the dormitories, as there are no means provided for isolating the man who may be thus attacked.

Nothing has been done towards providing bath rooms in the foremen's houses.

The Visitors would strongly urge that the Department should bring these matters under the notice of the Board of Works so that some improvement in the present most unsatisfactory state of things may be brought about.

The Visitors are glad that the Gardens, from an educational standpoint, are being more appreciated each year. A considerable increase on the 35,000 specimens sent out to educational institutions, as noted in the last Report, has taken place during the past twelve months.

D. H. MADDEN,
President.

June, 1913.

REPORT

OF THE

COUNCIL OF TRUSTEES

OF THE

NATIONAL LIBRARY OF IRELAND

For the Year 1912-13

TO THE SECRETARY OF THE DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND.

SIR

As Chairman of the Council of Trustees, I have the honour to submit the Report for the year ending March 31st, 1913.

The Library was open on 279 days. The attendances of readers numbered 190,657. This total is less than that of 1911-12 by 6,091, but the working year was a little shorter, having included the Easter Recess of 1912 and also of 1913. The average daily attendance was 688.

Attendances morning (10 to 6)	..	137,085
Attendances evening (6 to 10)	..	53,572
		190,657

The volumes catalogued and made accessible to readers were 4,471, of which 487 were folio, 661 quarto, and 3,373 octavo and smaller sizes. A table classifying these works by subject will be found in Appendix I, where also will be found statistics of book-binding, of borrowing by certain members of the Royal Dublin Society, and by certain officers of the Science and Art Institutions, besides lists of donors, and particulars as to donations.

The Trustees have pleasure in pointing out the steady maintenance of a high standard in the readers' attendances during the past decade:—

YEAR		TOTAL ATTENDANCES		DAILY AVERAGE*
1902-3,	..	174,786	..	588
1907-8,	..	190,657	..	646
1912-13,	..	190,657	..	688

*The daily averages do not vary exactly as the Attendances. Incidence of Easter and other causes slightly shorten or lengthen the working years.

Since the Council of Trustees first met, early in 1878, up to the close of March, 1913, the volumes actually catalogued, classified and shelved, so as to form an addition to the working collection, number 108,000.

In Appendix I. will be found a complete list of those who, by donations of books, have enriched the Library during the past year, with particulars of the more remarkable gifts. Here the Trustees desire to draw attention to the continued generosity of Mr. Henry Harden, LL.B., who has added many rare works, principally of the seventeenth and eighteenth centuries, including four sixteenth-century printed books. Also to the late Mr. J. Pierpont Morgan's further gifts of the sumptuous Catalogues of his Collections: (1) *Bronzes of the Renaissance and subsequent Periods*, by Wilhelm Bode, 2 vols.; and (2) *Watches*, by G. C. Williamson, Litt.D. Of the latter, but forty-five copies were printed.

Last year we reported work on the repairing, arranging and binding of the Library's large and valuable collection of miscellaneous maps. During the past year, this work has been continued, and the greater part of the European section has been catalogued on cards. Of the Longfield collection of manuscript surveys of Ireland, the two sections, "Dublin County" and "Dublin City" have been named, classified, cleaned, repaired and mounted, and are ready for binding. Progress also has been made in the arrangement of the section "Co. Meath."

The Bibliography of Irish Philology and Literature, the nature of which has been explained in former Reports, has been set up during the year, and the proofs read in final page form. Publications to the end of 1912 are included. An *Index Nominum et Rerum* is now in the printers' hands. The Trustees hope that the Bibliography will be issued before the end of June.

In their last Report the Trustees explained their plan of a complete Subject Index of the Library, a large part of which has been executed. During the past year the slips for the seven years 1904-10 have been blended with all the subject titles written some years ago by Cataloguers for the older portion of the Library, and this large body of titles (numbering approximately 130,000) is being examined and more finely arranged, in preparation for the editing of Mr. Best.

The Trustees are glad to note here two particularly valuable improvements in the building. In the Architecture Room, the shelving has been carried to the ceiling and a convenient gallery erected, which renders the books accessible. Further, the Board of Works has erected a staircase leading to the Attic chamber in the East Wing, which is "large and well lighted, and peculiarly adapted for the safe and orderly storage of

books." But no provision for shelving this apartment has been made, although asked for by the Trustees.

In parts of the Library, the Trustees are now face to face with congestion, which, as stated in many Reports, can be relieved only by completing the building according to the original plan. In their Report of 1905, the Trustees noted with satisfaction that the Accommodation Committee recognised the correctness of all the statements previously made by the Trustees, as to the need for increased accommodation in the building. The Committee itself implied that its proposals were to be considered only as "palliatives." Nearly all the possible "palliatives" have been exhausted. Since 1905, the Board of Works has taken pains to utilise every spare corner of the building. Little more can be done within the present limits. Indeed, to accommodate the books, disarrangement of their proper order has been necessary already.

Since the last Report was framed, the Library has suffered a great loss. Professor Edward Dowden died on April 8th, 1913. He had been a member of the Council since 1881, and during about ten years acted as Chairman. The last meeting at which he was present was that held on March 14th, 1913. His unusually comprehensive knowledge of literature gave him a place which it will be difficult to fill. His colleagues will long miss his enlightened counsels and his genial and kindly courtesy.

By authority of the Trustees, the Thirty-fifth Annual Conference of the Library Association, held at Liverpool in the week beginning September 2nd, 1912, was attended by the Librarian.

The Trustees submit the Annual Report of the Librarian, which deals in greater detail with certain sections of the internal administration of the Library.

T. A. FINLAY

Chairman

May 28rd, 1913

[851]

APPENDIX I.
STATISTICS AND LISTS

Subjoined are the total attendances of readers and the daily average since the Library was founded in 1877:—

YEAR		ATTEND- ANCE	DAILY AVERAGE
1878,	First complete year of Library	27,452	99
1889,	Latest year in Leinster House	51,328	174
1893,	First reliable record after transfer, 1890, to present building.		
1894,	.. .. .	113,888	388
1895,	.. .. .	119,590	404
1896,	.. .. .	125,690	427
1897,	.. .. .	136,565	462
1898,	.. .. .	137,832	470
1899,	.. .. .	142,218	486
1900,	.. .. .	154,878	529
1901,	.. .. .	148,405	506
1901 (January—March),	.. .. .	40,763	636
1901-1902,	.. .. .	150,780	618
1902-1903,	.. .. .	174,786	588
1903-1904,	.. .. .	181,385	619
1904-1905,	.. .. .	198,274	677
1905-1906,	.. .. .	193,462	658
1906-1907,	.. .. .	178,474	619
1907-1908,	.. .. .	190,657	666
1908-1909,	.. .. .	188,596	673
1909-1910,	.. .. .	189,766	668
1910-1911,	.. .. .	208,501	724
1911-1912,	.. .. .	196,748	702
1912-1913,	.. .. .	190,657	683

STATISTICS OF BOOKS "CATALOGUED AND MADE ACCESSIBLE TO READERS" SINCE JANUARY, 1895

YEAR		VOLUMES
1895,	.. .. .	2,451
1896,	.. .. .	2,363
1897,	.. .. .	2,802
1898,	.. .. .	2,775
1899,	.. .. .	3,360
1900,	.. .. .	3,185
1901 (January—March),	.. .. .	826
1901-2,	.. .. .	3,620
1902-3,	.. .. .	3,635
1903-4,	.. .. .	4,299
1904-5,	.. .. .	6,365
1905-6,	.. .. .	5,563
1906-7,	.. .. .	3,946
1907-8,	.. .. .	4,817
1908-9,	.. .. .	4,408
1909-10,	.. .. .	5,970
1910-11,	.. .. .	5,142
1911-12,	.. .. .	4,865
1912-13,	.. .. .	4,471

The volumes added to the Library and made accessible to readers during the year 1912-13 may be grouped as follows:—

Bibliography, Library Economy, Book Rarities, and Cyclopaedic works,	.. .. .	194
Newspapers, General Periodicals, .. .. .	.. .. .	278
Philosophy, .. .. .	.. .. .	79
Religion, Theology, Ecclesiastical History, .. .. .	.. .. .	374
Sociology, Statistics, Political Science, .. .. .	.. .. .	84

	VOLUMES
Political Economy,	81
Law,	60
Parliamentary Papers,	224
Administration,	103
Associations,	10
Education,	195
Commerce,	18
Amusements, Customs and Manners,	46
Philology,	137
General Science,	61
Mathematics,	38
Astronomy,	55
Physics, Light, Heat, Electricity,	41
Chemistry,	47
Geology,	57
Paleontology,	10
Biology, Anthropology, &c.,	46
Botany,	52
Zoology,	149
Useful Arts in General,	8
Patent Office Publications,	167
Medicine,	99
Engineering,	38
Agriculture,	111
Domestic Economy,	3
Communication, Commerce, Railway Guides, &c.,	45
Chemical Arts, Manufactures, and Trades,	40
Fine Arts in General,	53
Landscape Gardening,	5
Architecture,	60
Sculpture,	27
Drawing and Design,	34
Painting,	31
Engraving,	6
Photography,	3
Music,	113
Archæology,	56
General Literature,	26
English Literature (Essays, Poetry, Periodicals, &c.),	228
German,	34
French,	80
Italian,	21
Spanish,	8
Latin,	35
Greek,	37
Irish,	23
Other Literatures,	40
General History,	10
Geography and Travel,	126
Biography, Genealogy, Heraldry, &c.,	167
Ancient History,	9
History of Europe,	157
" " Asia,	12
" " Africa,	8
" " America,	16
" " Australia,	3

TOTAL 4,471

[353]

Subjoined is the return as to binding done for the Library during 1912 :—

In the binder's hands, Dec., 31st, 1911	..	980 vols.
Sent to the binder during 1912	..	4,500 ..
		5,480
Returned by binder during 1912	..	4,450 ..
In the binder's hands, Dec. 31st, 1912	..	1,030 ..

Subjoined is the account of books borrowed from the Library during the twelve months ending March 31, 1913, by members of the Royal Dublin Society, and by certain officers of the Institutions of Science and Art :—

In borrowers' hands, March 31st, 1913	..	68
Lent between April 1, 1912, and March 31, 1913, to members of the Royal Dublin Society,	..	456
Lent to officers of the Institutions of Science and Art,	..	423
		956
Returned during the twelve months,	..	872
In borrowers' hands, March 31st, 1913,	..	84
With members of the Royal Dublin Society,	..	38
With officers of the Institutions of Science and Art,	..	46
		84

The number of members of the Royal Dublin Society entitled to borrow according to the last official list published by the Society, is 278.

The following are some of the more noteworthy special gifts received during the year :—

Mr. Henry HARRIS, LL.B.—A number of books on general literature dating from the 16th century on, among them Beza's *De Franciscis lingue recte pronunciatione Tractatus*, Geneva, 1584; Vincent of Lerins' *Pro Catholice Fidei*, Cologne, 1654; Tacitus' *Historiarum et Annalium libri qui existunt*, Antwerp, 1674; Pietro Bembo's *De Gudio Ubaldio Feretrio*, Venice, 1639; Goetsert's *De Insectis*, London, 1686; Capaccio's *Antichità di Pozzuolo*, Rome, 1682; Florus' *Historia Romana*, 1630; Pausanias' *Exposition of the Greek*, 3rd ed., 1669; Stanhurst's *Dei immortales in corpore mortali patientis historia*, Coloniae Agrippinae, 1684; Florus' *Scripturae Romanorum libri quatuor*, Rotterdam, 1698; Deandini's *Voyage to Mount Libanus*, 1698; Bolton's *Justice of Peace for Ireland*, Dublin, 1683; *Liber Palmarum Davidis ex Arabico in Latinum translatus*, Rome, 1614; Scapula's *Lexicon Graeco-Latinum novum*, Londini, 1637; Keppeler's *Harmones mundi*, 1619; Comber's *Romanae forgeriae in the Councils during the first four centuries*, 1680; James's *Treatise of the corruption of Scripture, Councils and Fathers*, London, 1612; Pufendorf's *Le Droit de la Nature et des gens*, Amsterdam, 1712; Newton's *Philosophiae naturalis, editio secunda*, Cambridge, 1713; Marmontel's *Contes nouveaux*, 3 vols., Amsterdam, 1778; Muratori's *Dissertationi sopra le antichità Italiane*, 3 vols., Rome, 1775; Justin's *Historiarum ex Troja Pompeio libri XLIV*, Dublin, 1727; Taplin's *Practical and Experimental Farriery*, Dublin, 1796; Santos' *Description of the Escorial*, 1760; Schrevelius' *Lexicon Graeco-Latinum et Latino-Graecum*, 1753; Cox's *Travels in Switzerland*, 2 vols. Dublin, 1788.

The ROYAL DUBLIN SOCIETY.—In addition to the annual gift mentioned below, the following periodicals and papers :—*The Spectator*, 1878-1911; *Field*, 1858-9 (imperfect), 1908-11; *Aero*, May-December, 1911; *Aeronautica*, 1907-11; *Army and Navy Gazette*, 1860, 1878-1911; *Aurora*, 1908-11;

Breeders' Gazette, 1905-11; *British Bee Journal*, 1883-1911; *Broad Arrows*, 1895-1901; *Country Gentleman*, May, 1905-11; *Dublin Stock and Share List*, 1900-11; *Irish Textile Journal*, 1890-1910 (imperfect); *Judy*, 1878-1900; *Live Stock Journal*, 1883-1911 (imperfect); *Motor Car Journal*, August, 1910—December, 1911; *St. Stephen's Review*, February, 1888—December, 1891; *Vanity Fair*, 1880-1911; *Agricultural Gazette*, 1874-77; *Country Life*, 1904-06; *Farmers' Gazette*, 1843-77 (imperfect).

Mr. Edward S. Dodgson, M.A.—*Masandrell's Journey from Aleppo to Jerusalem in 1697*, 4th ed., 1721; *Aristotle's De Poetica*, Oxford, 1784; George Villiers, Duke of Buckingham: *Genuine Works*, Glasgow, 1752.

Professor Rudmose Brown.—*Theophrastus: History of the Grecian War*, Transl. by Thomas Hobbes, 1674.

The late Mr. J. Pierpoint Morgan.—*Branches of the Renaissance and subsequent Periods*, by Wilhelm Bode, 2 vols., 1910; *Catalogue of the Collection of Watches*, by G. C. Williamson, 1912; *Catalogue of the Morgan Collection of Chinese Porcelains*, 1907.

Mr. Joseph Gouss.—*Upwards of one hundred and forty volumes relating to general literature, including Rousseau's Emile and Sophie*, 4 vols., Dublin, 1779; *Imitation of Christ*, transl. G. Stanhope, Dublin, 1751.

C. T. Hagberg Wasmuth, LL.D.—*Zante*, 2 vols., 1904; *Parga*, 1907; *Fernach einer Geschichte von Parga*, 1908; etc., all by the Arch-Duke Ludwig Salvator of Austria.

Mrs. J. R. Gassner.—A collection of recent books and pamphlets on the Congo and Egyptian Sudan.

Mr. E. R. M'C. Dix.—*The Cork Evening Post*, Nov., 1753—Oct., 1760; *Advertiser Journal*, 1749-1751, etc.; *Universal Advertiser*, 1753-55; *Volunteer Journal*, 1753-1787, imperfect.

A list is subjoined of the names of persons from whom gifts have been received between April 1, 1912, and March 31, 1913:—

S.A.S., Prince Albert of Monaco.	Esposito, Mario.
Abbott, Rev. T. K., D.D.	Eyre, John.
Alabaster, E. Percy.	Fairbrother, Miss E. H.
Ballinger, John, M.A.	Farrell, H. W.
Bateman, C. J.	Forde, Dr. A. H.
Beer, William, of New Orleans.	Fordham, Sir H. G.
Benson, Mrs. Arthur.	Fryer, Dermot.
Bernard, Rt. Rev. J. H., D.D.	Garsin, John R., D.L.
Best, R. I.	Gough, Joseph.
Bigger, F. J.	Green, Mrs. J. R.
Boyd, Rev. S. T.	Groat, Richards, Messrs.
Brown, Prof. T. Rudmose.	Hanson, J. C. M.
Butler, Thomas.	Harden, Henry, LL.B.
Clover, Miss M., M.A.	Haslam, Mrs.
Colum, Padraic.	Hilditch, John.
Cook, Arthur J.	Humphreys, Arthur E.
Cook, Mrs. E. H.	Kavanagh, J. M., R.H.A.
Cooke, Capt. C. I. E., R.E.	Kelly, R. J.
Crosley, Clarence W.	Kleinmeyer, Maurice.
Dempsey, Rev. P., C.C.	Knapp, Capt. C. A.
Deat, F. H.	Lansome, Miss.
Dibdin, E. R.	Leslie, Seymour.
Dillon, Luke G.	Lyster, T. W., M.A.
Dix, E. R. M'C.	Lorton, F. W.
Dixon, Samuel G.	MacCarthy-Flanagan, W. T.
Dodgson, E. S., M.A.	McCready, Rev. C. T.
Dowden, The late Professor R.	MacDonough, James J.

[355]

MacIverine, J. B. S., R.H.A.	Russell, George W.
MacKall, Miss S. S.	Ryle and Quirk, Messrs., Tralee.
MacWalter, J. C., M.D.	Scharf, R. F., Ph.D.
MacWeeney, Prof. E. J.	Stephens, Miss.
Manifold-Craig, Lt.-Col. R.	Steven, R.
Marie Joseph du Sacré-Cœur, Le	Stokes, Miss Ethel.
R. Père.	Tallow, J. T.
Martens, H.	Tempest, William.
Morgan, The late J. Pierpont.	Thompson, W. P.
Murphy, T. W.	Trimble, W. H.
Murray, David.	Twigg, John H.
Nell, J. C.	Waterford News, Editor of.
O'Mahony, Miss.	Webb, Miss Deborah.
Pargoe, N. B.	Weich, Robert.
Pedley, R. D.	Westropp, Thomas J.
Peard, Eugene.	White, Rev. Newport J. D., D.D.
Præger, R. Li.	Willinson, James.
Prideaux, W. R. B.	Woods, Hugh.
Ramos-Cosho, José.	Wright, C. T. Hagberg, LL.D.
Reeves, P. Oswald.	Wright, Rev. W. Bell, M.A.
Reid, Rt. Hon. Sir George.	

Gifts have been received between April 1, 1912, and March 31, 1913, from the following Public Departments, Public Bodies, Public Institutions, and Learned or Literary Societies:—

His Majesty's Stationery Office.
 Lords Commissioners of H.M. Treasury.
 Lords Commissioners, Admiralty.
 British Museum.
 Board of Trade.
 Patent Office.
 Foreign Office.
 War Office.
 Office of the Registrar-General of Scotland.
 Astronomer Royal, Greenwich.
 " " Scotland.
 " " Cape of Good Hope.
 Ordnance Survey of England and Wales.
 " " Ireland.
 Geological Survey of Great Britain.
 " " " Ireland.
 " " " Scotland.
 " " " Canada.
 " " " India.
 " " " United States of America.
 Union of South Africa, Mines Department.
 India Office, Whitehall.
 Archaeological Survey of India Department, Calcutta.
 " " " Madras.
 Botanical Survey of India.
 Government of Bombay.
 " " Bengal.
 Department of Agriculture, India.
 United Provinces Government, Allahabad.
 Superintendent of Government Printing, India.
 Meteorological Office, India.
 Government of Canada.
 Ministry of Interior, Canada.
 Survey Department, Giza, Egypt.
 Italian Government.

Government of Formosa, Bureau of Productive Industries.
 Republic of Uruguay.
 Department of Marine, Ottawa.
 Department of Agriculture, Ottawa.
 Department of the Interior, U.S.A.
 Department of Agriculture, U.S.A.
 Department of Health, N.Y.
 Bureau of Labor, Washington.
 Representative Commonwealth of Australia, London.
 Commissioners of Education, Washington.
 Department of Commerce and Labor, U.S.A.
 Tenement House Department, N.Y.
 Smithsonian Institution.
 Bureau of Statistics, Treasury Department, U.S.A.
 Coast and Geodetic Survey, U.S.A.
 Minister of Education, Ontario.
 South African Government Printer.
 Department of Agriculture and Technical Instruction for Ireland.
 Congested Districts Board.
 Census Commissioners, Charlemont House, Dublin.
 National Health Insurance Commissioners.
 Superintendent of Emigration for Canada.
 High Commissioner for New Zealand.
 Australia.
 Board of Education, South Kensington.
 Board of Intermediate Education, Ireland.
 Office of Records of Scotland.
 Public Record Office, London.
 Corporation of London.
 Corporation of Manchester.
 Corporation of Liverpool.
 Corporation of Dublin.
 Corporation of Belfast.
 Corporation of Lincoln.
 Port and Docks Board, Dublin.
 Belfast Harbour Commissioners.
 London County Council.
 London School Board.
 Royal Society, London.
 Royal Society, Edinburgh.
 Australasian Association for the Advancement of Science.
 British Association.
 Pharmaceutical Society of Great Britain.
 Pharmaceutical Society of Ireland.
 Geological Society of London.
 Royal Geographical Society.
 Botanic Gardens, Kew.
 Botanic Gardens, Sripur, India.
 Pennsylvania Society.
 Linnean Society of London.
 Musée Océanographique, Monaco.
 First Church of Christ Scientist, Dublin.
 British and Foreign Bible Society.
 Dublin Sanitary Association.
 Peace Society, London.
 General Medical Council, Dublin.
 London.
 City of Dublin Public Health Office.
 Royal Anthropological Institute.
 Royal Archaeological Institute.
 Manchester Public Library.
 New South Wales Public Library.
 National Library of Wales.

[337]

Patent Office Library.
 Sunderland Public Library, Museum and Art Gallery.
 Bibliotheca Nacional, Habana.
 Westminster Public Library.
 Workington Borough Library.
 Wigam Public Library.
 Windsor Public Library, Ontario.
 Newnham College, Cambridge.
 Alexandra College, Dublin.
 Royal Holloway College.
 King's College, London.
 London School of Economics.
 Maynooth College, League of St. Columba.
 Royal College of Science, Dublin.
 Trinity College, Dublin: The Board.
 National University of Ireland.
 Royal College of Physicians, Ireland.
 Queen's University of Belfast.
 University College, Cork.
 University College, Dublin.
 University College, Galway.
 University of Wales.
 University of Sheffield.
 University of Leeds.
 University of Liverpool.
 University of Manchester.
 University of Birmingham.
 University of Cambridge.
 University of London.
 University College, London.
 Durham University.
 St. Andrews University.
 Edinburgh University.
 Glasgow University.
 Aberdeen University.
 Leland Stanford University, California.
 Harvard University.
 New York University.
 Yale University.
 Princeton University.
 California University.
 Cornell University.
 University of Illinois.
 Chicago University.
 Catholic University, Washington.
 Carnegie Foundation for the Advancement of Teaching.
 College of Preceptors, London.
 Dartmouth College, N.H.
 Sydney University.
 Melbourne University.
 Johns Hopkins University.
 Imperial University, Kyoto, Japan.
 Royal Sanitary Institute.
 Royal Institute of British Architects, London.
 Institute of Actuaries, London.
 Society of Accountants and Auditors, London.
 Chartered Institute of Secretaries.
 Chemical Society, London.
 Society of Chemical Industry, London.
 House and Town Planning Association of Ireland.
 Society of Arts, London.
 League of the Empire.
 Australian Museum, Sydney.

22*

Victoria and Albert Museum, South Kensington.
 Boston Museum of Fine Arts.
 United States National Museum.
 Metropolitan Museum of Art, New York.
 National Museum of Wales.
 Manchester Museum.
 Palestine Exploration Fund.
 Free Trade Union.
 Tariff Reform League.
 Hudson Fulton Celebration, New York.
 Indian National Congress.
 Research Defence Society, London.
 Hungarian Ornithological Society, Budapest.
 Belfast Naturalists' Field Club.
 Belfast Natural History and Philosophical Society.
 Belfast Municipal Art Gallery and Museum.
 Irish Agricultural Organisation Association.
 Irish Landowners' Convention.
 Royal Botanic Gardens, Glasnevin.
 Royal City of Dublin Hospital.
 Dublin Fire Brigade, per T. P. Furell.
 Irish Unionist Alliance.
 Unionist Association of Ireland.
 Irish Central Bureau for the Employment of Women.
 City of Dublin Technical Schools.
 Municipal Technical Institute, Belfast.
 Theosophical Society, London.
 Methodist Missionary Society, London.
 Zoological Society, London.
 Royal Zoological Society, Ireland.
 Incorporated Law Society, Ireland.
 College Historical Society, Dublin.
 Statistical and Social Inquiry Society of Ireland.
 Warrington Municipal Museum.
 Victoria Institute, Worcester.
 Aberdeen Public Library.
 Ashton-under-Lyne Public Library.
 Battersea Public Libraries.
 Birmingham Free Libraries.
 Bristol Public Library.
 Boston Public Library.
 Brighton Public Library.
 St. Helen's Public Library.
 Imperial Library, Calcutta.
 Bodleian Library, Oxford.
 Edinburgh University Library.
 Cambridge University Library.
 Croydon Central Library.
 Cardiff Public Library.
 Library of Congress, U.S.A.
 New York State Library.
 Harvard University Library.
 Cornell University Library.
 Coventry Public Library.
 Dundee Central Library.
 Minnesota University Library.
 St. Andrews University Library.
 St. Louis Public Library.
 Kingston-upon-Thames Public Library.
 John Rylands Library, Manchester.
 Leeds University Library.
 Liverpool Public Library.

The following Irish Newspapers, presented during the year 1912, are filed for reference when bound :—

Anglo-Celt (Cavan).
Armagh Guardian.
Ballymena Weekly Telegraph.
Ballymoney Free Press.
Banbridge Chronicle.
Belfast News-Letter.
Bray and South Dublin Herald.
Carrickfergus Advertiser.
Clare Journal (Ennis).
Coleraine Chronicle.
Cork Free Press.
Cork Constitution.
Cork Examiner.
Cork County Eagle (Skibbereen).
Derry Standard.
Donagh Vindicator (Ballyshannon).
Dublin Saturday Post.
Dundalk Democrat.
Dungannon News.
East Galway Democrat.
Echo, The (Enniscorthy).
Enniscorthy Guardian.
Evening Herald (Dublin).
Evening Telegraph (Dublin).
Freeman's Journal.
Free Press (Waterford).
Galway Express.
General Advertiser, (Dublin).
Ireland's Own (Dublin).
Irish Catholic (Dublin).
Irish Independent (Dublin).
Irish Emerald (Dublin).
Irish Freedom.
Irish News (Belfast).
Irish Post (Cavan).
Irish Weekly Independent.
Irish Weekly (Belfast).
Irish Weekly Mail.

Kerry Evening Post.
Kildare Observer (Naas).
Kilkenny Journal.
Kilkenny Moderator.
Larne Times.
Leinster Express (Maryborough).
Leinster Leader (Naas).
Limerick Chronicle.
Limerick Leader.
Lisburn Herald.
Lurgan Mail.
Meath Chronicle (Kells).
Mid-Ulster Mail (Cookstown).
Nationalist, The (Cork).
Nationalist, The (Chennai).
New Ross Standard.
Northern Constitution (Coleraine).
Northern Whig (Belfast).
People, Westford.
Periplus News.
Roocommon Messenger.
Saturday Record (Kinn).
Shamrock and Irish Emerald.
Shin Fila.
Sligo Champion.
Sligo Independent.
Sport (Dublin).
Sunday Independent (Dublin).
Team Herald.
Tyrone Constitution (Crumagh).
Weekly Freeman and Suppliment.
Weekly Irish Times.
Western News (Ballinaloe).
Westmeath Examiner (Mullingar).
Wicklow News-Letter.
Wicklow People.
Witness, The (Belfast).

The Royal Dublin Society has continued its generous gift of daily and weekly papers as follows :—

Belfast News-Letter.
Cork Constitution.
Daily Express (Dublin).
Dublin Evening Mail.
Evening Herald.
Evening Telegraph.
Daily Graphia.
Daily Mail.
Daily Mail (over seas ed.).
Daily News.
Daily Chronicle.
Daily Telegraph.
Dublin Daily Stock and Share List.
Freeman's Journal.
Financial News.
Pigeon (Paris).
Globe.
Graphia.
Scotsman.
Illustrated London News.
Irish Independent.
Irish Times.

Illustrated Sporting & Dramatic News.
Illustration (Paris).
Illustrirte Zeitung.
Journal de Debats (Paris).
Lady's Pictorial.
Morning Post.
New York Tribune.
Ladies Weekly (New York).
Observer.
Pall Mall Gazette.
Queen.
Evening Standard and St. James's Gazette.
Sinn Fila.
Sketch.
Sphere.
Standard.
Tatler.
Times.
Truth.
Westminster Gazette.
World.

The following societies present publications annually :—

- The Royal Society of Edinburgh : *Transactions and Proceedings*.
- The Royal Society : *Proceedings*.
- The Royal Dublin Society : *Proceedings, and Scientific Proceedings and Transactions*.
- The Royal Irish Academy : *Proceedings, and Todd Lectures*.
- Royal Society of Antiquaries, Ireland : *Journal*.
- The County Kildare Archaeological Society : *Journal*.
- Belfast Naturalists' Field Club : *Report and Proceedings*.
- Royal Institute of British Architects : *Journal, and Calendar*.
- Society of Chemical Industry : *Journal*.
- Society for the Preservation of the Irish Language : *Report*.
- Royal Academy of Medicine in Ireland : *Transactions*.
- Institute of Bankers in Ireland : *Journal*.
- North Munster Archaeological Society : *Journal*.

The following periodical publications have been presented in the year 1912 to the National Library of Ireland, either by the publishers, or by private donors, or by public bodies :—

- Alliance News*.
- An Lochraon*.
- Board of Trade Journal*.
- Board of Trade Labour Gazette*.
- Board of Agriculture Journal*.
- British Medical Journal*.
- Bulletin, Department of Labor, U.S.A.*
- Christian Science Journal*.
- Civil Service Compendium*.
- Civil Service Weekly*.
- Cyclists' Touring Club Gazette*.
- Department of Agriculture and Technical Instruction for Ireland "Journal."*
- Drapers' Record*.
- Father Mathew Record*.
- Free Russia*.
- Gentleman*.
- International Theosophical Chronicle*.
- Irish Cyclist*.
- Irish Draper*.
- Irish Field*.
- Irish Homestead*.
- Irish Ironmonger*.
- Írisleabhar Muilge Nuadh*.
- Irish Envoy*.
- Irish Tobacco Trade Journal*.
- Irish Vintner and Grocer*.
- Kew Bulletin*.
- Musical Herald*.
- Nation in Arms*.
- New Century Path*.
- New Church Magazine*.
- Pharmaceutical Journal*.
- Progrès Industriels*.
- Socialist, The*.
- T.C.D.*

[361]

APPENDIX II.

FOURTEENTH REPORT OF THE LIBRARIAN, 1909-1910

New Series

THE COUNCIL OF TRUSTEES

This the Fourteenth Report of the new series ordered January, 1909, is occupied with the progress of tasks described last year, rather than with new enterprises.

Author Catalogue

It has been noted in the Trustees' Report that the Author Catalogue for 1909 includes many corrective titles, formerly written for books on Irish History and Topography which have been combined with the accessions of the year. It is hoped to print gradually all the corrective titles for the remaining sections of the Library by combining them with the catalogues of future years, while by issuing one double volume during each year accessions of printing may steadily be overtaken, and the printed catalogue brought within, at most, a year from the date of each day's accessions to the Library.

Desk Author Catalogue.

Work on the Desk Catalogue has proceeded steadily, all the entries of the Author Catalogue of 1908 having been inserted, while useful rectification of many parts which had become confused has been accomplished. Anyone seeking information under the following titles and their neighbours would be much aided by the improvement:—Ambrose, Barrett, Carlyle, Dowden, Edwards, Egypt, Ramsay, Spenser, Vincent, Virgil, Voltaire, Vondel, Worcester, Wordsworth.

Cataloguers' Work

Amid the large miscellany of books catalogued may be specially mentioned the main portion of Mr. Dix's collection of "Belfast Printed Books"; the numerous and interesting gifts of Mr. Harden and of Miss Shackleton, the valuable publications on Education and Indian Ethnology and Philology presented by the University of California, and the great standard edition of the works of Handel published by the German *Handel Gesellschaft*, which was completed and added to the accession register. Moreover, temporary slips were written for the long and valuable series *Pflanzenreich* (to make possible its immediate use on the shelves by botanists pending its completion some years hence); the *Katalog der Astronomisches Gesellschaft*, and many extensive and costly serial publications, were overhauled, collated and catalogued, while the cataloguing of all complete new books acquired by purchase has been kept up to date.

The Printed Subject Index and its Continuation

The report on the printed Subject Index this year is brief, because all the workers available have been employed in completing the extremely important task described at page 355 of last year's Report, namely, the blending of the subject slips (written 1899-1903) for the older part of the Library with the material prepared for our next volume, and then in further revisionary preparation of this huge mass of slips (about 180,000) for the final editing of Mr. Bos.

Desk Subject Index

During the year, the task of incorporating the entries from the Decennial Subject-Index with those of preceding years has been completed, and afterwards much useful revision and extension of the work has been done.

General Re-arrangement of the Books

Every year, as the Trustees are aware, the order of the various sections of the Library must be examined, corrected and sometimes modified. During the past year the chief subjects thus dealt with have been the Scientific Periodicals, the sections of English Literature, and English, French, Italian, Spanish and Russian History. But many individual books and many minor subsections have had their classification considered in the light of fresh experience and new knowledge; modifications in arrangement with fresh labelling being introduced when necessary.

Irish Bibliography

In July, 1912, copy of this Bibliography was sent to the printer, and the whole body of the work has been set up since and revised in page-form. The Trustees, with the support of the Department, have pledged with success that 1,700 copies should be printed by H.M. Stationery Office for sale to the public, besides a few hundred to be allotted to the Library for service there, for judicious distribution, and for exchange with other libraries. H.M. Stationery Office, at the Trustees' request, have also sanctioned a good cloth binding, and a special paper.

Maps

The work of sorting, cleaning, repairing and mounting the large body of Miscellaneous Maps in the Library has been continued during the year, and now almost the whole of the collection is arranged and bound. The card catalogue of maps of the countries of Europe is nearly complete. The "Longfield Collection," which embraces 285 large scale maps of Irish estates and holdings to the number of many thousand, has occupied attention during the year; all the Co. Dublin maps, and those of two baronies of Meath, have been repaired and mounted where necessary, and are ready to be bound. Many miscellaneous maps are added annually to the general collection. These now can be dealt with at once, by being mounted in their proper volumes; where juxtaposition with other maps of the same region greatly increases the value of each and all.

Donations

The gifts of the late Mr. J. Pierpont Morgan and of Mr. Henry Harben, LL.B., have been referred to by the Trustees in their Report. Other noteworthy gifts are enumerated in Appendix I. Special mention might also be made of Mr. E. R. M'C. Dir's gift of valuable eighteenth century newspapers, including among others the *Munster Journal*, 1749-51, and Mrs. J. R. Green's gift of a collection of recent works on the Congo and the Egyptian Sudan. The Royal Dublin Society, in addition to their annual gifts of daily and weekly newspapers, have greatly enriched the Library by a further donation of a large number of weekly periodicals, some extending over a long period, for instance, the *Spectator*, 1878-1911; *Family Fair*, 1850-1911; and the *Army and Navy Gazette*, 1879-1911, etc.

July Collection

During the closure for re-arrangement and dusting in July and August, considerable progress was made in two important tasks already well

[363]

advanced: careful impression of the Library stamp in many more volumes of the Joly Collection, and the marking, both within and without, the place of each book in the classified order.

Newspaper Collection

During the same period much work was done in re-arranging the now very large and important newspaper collection in the Basement, which had grown confused by overcrowding and congestion. Some years had passed since the last re-arrangement of this collection; the task occupied several days, and presented difficulties which were solved chiefly by use of the basement extension in the East Wing, noted in the Trustees' Report for 1910-1911.

Additional room for Book-Storage

The Trustees in their Report mention a structural improvement long desired by them—the shelving (with a gallery) of the upper walls of the Architecture Room. The advantage of this, in giving improved arrangement for particularly valuable sections, with relief of congestion, will be considerable, but the account of it must find place in a future Report. Meanwhile, the fitting up of the spacious eastern attic doubtless will follow soon upon the recent erection of the new staircase by which it now is reached, and to this fitting up the Librarian looks forward with anxiety, as the need of the space for expansion is pressing. After this, hardly anything more that is considerable can be done within the present building.

The Trustees, of course, will observe that I do not dwell upon the daily round of ordinary duties, nor indeed upon some important special topics. There must be omissions in the Report of any particular year, still, the deficiency of one Report is made good by the statement in another as the series goes on.

T. W. LYNNER,
Librarian.